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Temporal constraints on progressive rifting of a hyper-extended continental margin using bedrock and detrital zircon (U-Th)/(Pb-He) dating, Mauléon Basin, western Pyrenees

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Abstract

Temporal constraints on progressive rifting of a hyper-extended continental margin using bedrock and detrital zircon (U-Th)/(Pb-He) dating, Mauléon Basin, western Pyrenees

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While the understanding of the structural, temporal, and thermal evolution of rifted continental margins has significantly evolved over the past several decades, critical outstanding questions remain, especially concerning the thermal evolution as well as the spatial and temporal intricacies of tectonically controlled sedimentation and sedimentary provenance during progressive rifting and hyper-extension. To constrain the proximal to distal tectonic, stratigraphic and thermal evolution of rifted continental margins, bedrock and detrital zircon (U-Th)/He (ZHe) and zircon U-Pb double dating techniques were applied to the Mauléon Basin of the western Pyrenees. This non-magmatic, asymmetric, hyper-extended rift basin formed during Early Cretaceous hyper-extension of Iberian lithosphere, as a result of lateral propagation of rifting in the Bay of Biscay, and experienced a limited magnitude of shortening during post-rift Pyrenean inversion. This resulted in the preservation of outcrops of sedimentary cover, upper and lower crustal sections, serpentinized lithospheric mantle, and the basic rift-relationships; making the

Mauléon Basin an ideal locality to constrain rift-related processes during hyper-extension.

Detrital zircon U-Pb analyses indicate that the proximal rift margin is primarily composed of pre-rift strata with Pan-African zircon U-Pb signatures and primary age peaks at ~615 Ma and ~1000 Ma. In contrast, the distal rift margin is composed of exhumed mid-lower crustal granulites, which have a similar Pan-African signature but with additional Variscan (Permian) overgrowths. Detrital zircon U-Pb analyses of syn- to post-rift strata indicate compartmentalized, local sourcing from the pre-rift strata in the proximal margin and the exhumed lower crust in the distal margin. Late syn- to post-rift strata show a shift to non-compartmentalized, regional sourcing from the proximal rift margin and hinterland. These observations are combined to present a sediment dispersal model for the progression of rifting.

ZHe analyses shows preservation of two distinct age domains: an elevation-invariant age cluster at ~98 Ma, interpreted as rift-related cooling due to major exhumation along the SMD, and an elevation-invariant age cluster at ~50 Ma, interpreted as rapid cooling related to Pyrenean inversion. These results indicate the Mauléon Basin experienced early syn-rift heating prior to the exhumation of parts of the proximal domain to <180°C; these are the only localities that record rift-related timing. Based on thermochronometric modeling and burial estimates the syn-rift geothermal gradients in the necking domain were as high as ~80°C/km and ~80-100°C/km in the hyper-thinned domain. From the early syn-rift until Pyrenean inversion at ~50 Ma, most of the distal rift margin remained at temperatures >180°C. These observations of heating and high geothermal gradients are compared to geologic and numerical rifting models to give insight into preferred models for the rifting evolution of hyper-extended margins.

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Chapter 1: Introduction

STRUCTURE OF THESIS

This thesis is divided into three chapters. The first is meant as an introductory chapter to introduce the motivation of the study, reasoning behind the field area, and the methodology of different analytical techniques used. The next two chapters are the main portions of the thesis and are written in a journal article format and will be submitted for publication as two separate manuscripts. The second chapter is focused on the interpretation of the detrital zircon U-Pb analyses of the Mauléon Basin. By characterizing the mid-lower crust and pre-rift units, it becomes possible to constrain the syn- and post-rift evolution of the margin, including sediment dispersal during the progression of rifting. Chapter three is focused on the interpretation of (U-Th)/He analyses from the Mauléon Basin. By sampling vertical transects from different structural rift domains it is possible to interpret the thermal and temporal evolution of the margin during the progression of rifting.

STUDY MOTIVATION

While the understanding of the structural, temporal, and thermal evolution of rifted continental margins has significantly evolved over the past several decades, fundamental aspects of the temporal and thermal evolution of these margins during lithospheric stretching and breakup, in particular in the absence of voluminous magmatism, remains poorly understood. The processes that occur at magma-poor rift margins during continental breakup and margin development have long been debated and modeled based on academic and industry observations of modern continental rifted

margins (e.g., Iberia-Newfoundland or NW Australian margins), exhumed fossil continental rifted margins (e.g., eastern Alps or Corsica), DSP/IODP borehole observations, and GXT reflection seismic surveys. Interpretations and observations from such studies have provided transformative insights and led to the development of a suite of holistic and process-oriented models for magma-poor rift margins and their evolution (Froitzheim and Eberli, 1990; Florineth and Froitzheim, 1994; Manatschal and Nievergelt, 1997; Driscoll and Karner, 1998; Whitmarsh et al., 2001; Pérez-Gussinyé and Reston, 2001; Huismans and Beaumont, 2002; Contrucci et al., 2004; Moulin et al., 2005; Lavier and Manatschal, 2006; Manatschal et al., 2007; Osmundsen and Ebbing, 2008; Aslanian et al., 2009; Péron-Pinvidic and Manatschal, 2009; Unternehr et al., 2010; Péron-Pinvidic and Manatschal, 2010; Perez-Gussinye, 2012; Beltrando et al., 2013; Peron-Pinvidic et al., 2013; Sutra et al., 2013; Tugend et al., 2014). These novel geological and numerical models have focused on the processes accommodating crustal and lithospheric break-up as well as the structural evolution during progressive strain localization from diffusive rifting, crustal necking, hyper-extension, mantle exhumation, and eventual lithospheric separation to sea floor spreading. Even though these models have drastically improved the conceptual understanding of magma-poor rifted margins, critical outstanding questions remain, especially concerning the thermal evolution as well as the spatial and temporal intricacies of tectonically controlled sedimentation and sedimentary provenance during progressive rifting and hyper-extension.

Detailed studies that would provide insights to these questions are often hampered by the general inaccessibility of hyper-extended margins due to either their submarine locations (Iberian-Newfoundland margin) or post-rifting burial by thick passive margin sediments (Gulf of Mexico). This has limited studies to reflection and refraction seismic surveys and/or sparse boreholes that generally do not penetrate the pre-rift bedrock or

syn-rift sedimentary sections within the necking domain or the distal rifted margin. Alternatively, exhumed fossil margins can expose bedrock geometries of rifted and hyper-extended margins in spectacular fashion as preserved in the eastern Alps (Err-Ela or Tasna), but they tend to be variably tectonized with overprinted thermal histories (Hurford et al., 1989; Froitzheim and Eberli, 1990; Florineth and Froitzheim, 1994; Froitzheim and Rubatto, 1998; Masini et al., 2012). In contrast, the Mauléon hyper-extended rift basin not only offers access to a relatively complete stratigraphic record, but the degree of inversion- and shortening related geometric and thermal overprinting seems to be relatively modest in the western Pyrenees (Teixell, 1998; Jammes et al., 2009; Masini et al., 2014; Tugend et al., 2014). To constrain the proximal to distal tectonic, stratigraphic and thermal evolution of rifted continental margins, bedrock and detrital zircon (U-Th)/He (ZHe) and zircon U-Pb double dating techniques were applied to the Mauléon Basin of the western Pyrenees.

THE MAULÉON BASIN NATURAL LABORATORY

The Mauléon Basin is a non-magmatic, asymmetric, hyper-extended rift basin formed during Early Cretaceous hyper-extension of Iberian lithosphere as a result of lateral propagation of rifting in the Bay of Biscay (Lagabrielle and Bodinier, 2008; Jammes et al., 2009; Masini et al., 2014). The opening of the South Mauléon sub-Basin is interpreted to have occurred in the late Aptian and was accommodated by the South Mauléon Detachment (SMD), which exhumed upper crustal Paleozoic section (Jammes et al., 2009; Masini et al., 2014). The current model envisions that from the Late Aptian to Lower Albian progressive strain accommodating crustal thinning was transferred from the SMD along a mid-crust decollement to the mid- and lower-crust of the Arzacq Basin,

leading to an asymmetric rift geometry (Masini et al., 2014). In the mid-Albian the locus of extension shifted northward with the inception of the North Mauléon Detachment (NMD), forming the North Mauléon sub-Basin (Jammes et al., 2009; Masini et al., 2014). Due to lack of exposure of the stratigraphic record, Masini et al. (2014) notes that it is difficult to determine the cessation of activity along the NMD.

During Pyrenean orogenesis a total of about 75-80 km of shortening occurred in the west-central Pyrenees between the Late Cretaceous and early Miocene at an average rate of 1.2 mm/yr (Teixell, 1998). Balanced cross sections and surface structure restorations show that the amount of shortening decreases from east to west across the Pyrenees (Seguret and Daignieres, 1986; Teixell, 1998). In the western Pyrenees, shortening caused the Mauléon Basin to be partially inverted as a tectonic pop-up block. The North Pyrenean Frontal thrust system to the north of the Mauléon Basin and the Igountze-Mendibelza or Lakora thrust to the south of the Mauléon Basin accommodated most of this shortening as the basin was thrust northward over the former Grand Rieu high and Arzacq domains and southward onto the Axial domain (Casteras, 1969; Teixell, 1990; Muñoz, 1992; Daignières et al., 1994; Teixell, 1998). Masini et al. (2014) notes that within the Mauléon Basin these thrust systems cut through the basement and east of the basin the thrusts cut the sedimentary cover. They interpret that this may cause more of the deformation to be accommodated at a deeper crustal level in the Mauléon Basin, allowing for greater preservation of pre-, syn- and post-rift structures as compared to the central and eastern Pyrenees. These properties make the Mauléon Basin an ideal locality for the application of detrital zircon U-Pb and low temperature thermochronometric techniques to constrain rift-related processes during hyper-extension.

DOUBLE DATING METHODOLOGY

Modern thermochronometric dating techniques have a range of applications in quantifying tectonic and sedimentary processes at rifted continental margins. Zircon (U-Th)/He (ZHe) and detrital zircon U-Pb dating, constrain sediment provenance and the temporal and thermal evolution of tectonically active source areas. Additionally, hyper-extended margin basins, such as the Mauléon Basin, hold inverted unroofing sequences that record changes in sediment source or exhumation rates as different lithospheric levels are exhumed, eroded and deposited during progressive continental break-up. Furthermore, double dating is a technique in which a combination of U-Pb geochronology and (U-Th)/He thermochronology are completed on the same grain. Using the combination of these techniques it is possible to determine a suite of geologic constraints including: the crystallization age of the zircons, the grain provenance, maximum depositional age of the stratigraphic units, spatial and temporal sediment dispersal variations, temperature and burial constraints, and rates of exhumation. Zircon double dating studies have shown the power of coupling these data to further refine provenance signatures, to understand the detailed progression and timing of rifting and reconstruct a more complete tectonic evolution of hyper-extended continental margins.

Sampling strategy and preparation

This study presents a high sampling density and structurally integrated dataset from pre-, syn-, and post-rift strata from the proximal to distal Mauléon Basin. Samples were collected from all the available stratigraphic intervals and within a structural context in the footwall of detachment faults and in vertical transects within the different structural domains to provide more robust insights into spatial, temporal, and thermal variations. Two to four kilograms of rock were taken for each sample and the sample location, elevation, description of unit, photographs, and any other pertinent measurements were

collected. Samples were shipped back to The University of Texas at Austin to complete U-Pb and (U-Th)/He analyses.

Conventional mineral separation techniques were used to separate samples at the facilities at the University of Texas at Austin. A hand specimen for each sample was saved and the remaining rock was crushed and ground using a jaw crusher, cone crusher and disc mill. The heavy minerals were then sorted out using a Gemini water table (a few samples were done using a Wilfley table), bromoform heavy liquid, multi-step Frantz magnetic separation and finally methylene iodide heavy liquid. At this point in the heavy mineral separation, 80% of the sample separates contained enough zircon to proceed to U-Pb analyses.

Zircon U-Pb Geochronology

Detrital zircon analysis has developed into a widely used and powerful tool in detrital provenance studies. This technique involves measuring the concentrations of different uranium and lead isotopes, as ^{238}U, ^{235}U and ^{232}Th decay to stable Pb isotopes, and parent-daughter ratios of these isotopes and can be used for age determination (Faure, 1998; Davis et al., 2003). These techniques can help to determine the crystallization age and detrital zircon provenance (Gehrels et al., 2008a; Gehrels, 2011). In this study the concentrations of these isotopes in zircon were determined using laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) techniques that have been used since the 1990's (Feng et al., 1993; Fryer et al., 1993).

Once the zircon fractions were obtained through the mineral separation techniques discussed above. The zircon fractions were mounted on 1 inch epoxy resin mounts by sprinkling whole and unpolished zircons on low lead double-sided tape. The mounts were then photographed to map the zircon grains and mark those that were analyzed. At least

120 unknown zircon grains were chosen at random to be analyzed to obtain a statistically robust dataset (Vermeesch, 2004). In addition to the 120 unknown grains, GJ1 was analyzed as the primary reference standard and Pak 1 and Plesovice were analyzed as secondary reference standards, these were dispersed throughout the analyses to correct for fractionation and also to determine the accuracy of the analyses. The grains were analyzed using a PhotonMachine Analyte G.2 Excimer ArF 193nm laser with a large-volume Helex sample cell. After six pre-ablation cleaning shots and a baseline reading, each zircon grain was ablated for 300 shots at a 10 Hz repetition rate, 6 to 7 mJ energy, 16% power and 1.88 Jcm^2. This results in a ~30 μm wide and ~16 μm deep ablation pit. Each non-polished zircon grain was ablated on its flat face perpendicular to the long axis of the grain, which allows for depth profiling. This technique enables the analysis of multiple zircon growth events evident in core and rim ages. But since the pit depth is only ~16 μm, for large grains it is possible not to reach the oldest core age and very thick rims may not allow for the analysis of core ages (Stockli and Stockli, 2013). The ablated aerosol is then mixed with ultrapure helium carrier gas flowing at about 0.5 liters per minute and transported to the Element2 ICP-MS to be analyzed. The ICP-MS RF power set to 1000-1250 W and the argon gas flows at about 0.7 liters per minute. The secondary electron multiplier detection system analyzes masses 202, 204, 206, 207, 208, 232, 235, 238 and 254. To obtain bedrock and detrital U-Pb ages for the samples, the data from the analyses were then reduced using the Iolite data reduction software and VizualAge (Paton et al., 2011; Petrus and Kamber, 2012). Ages reported from the reduction have 2σ propagated uncertainties and the ages that are reported in kernel density estimation plots have less than 10% discordance. LA-ICP-MS analyses were completed at the UTChron facilities at the Jackson School of Geosciences at the University of Texas at Austin.

Zircon (U-Th)/He Thermochronology

Zircon (U-Th)/He thermochronometry (ZHe) has been shown to be a powerful tool in elucidating exhumation histories in a variety of tectonic environments (Stockli, 2005; Reiners, 2005; Biswas et al., 2007; Wolfe and Stockli, 2010). In the case of this study, it is used to understand the time-temperature history during the progression of rifting. As ^{238}U, ^{235}U, and ^{232}Th radioactively decay they produce ^{4}He which can either be retained or diffusively lost from the crystal due to thermally controlled volume diffusion and mineral specific properties (Farley et al., 1996). When ^{4}He is produced it travels through the grain for some distance before stopping, this distance is termed the stopping distance. For zircon the stopping distance is ~16.6μm, ~19.6μm, and ~19.3μm for ^{238}U, ^{235}U, and ^{232}Th, respectively (Farley et al., 1996). Therefore, if an alpha particle is produced in the outer ~20μm it can be ejected from the crystal lattice. This loss must be accounted for when determining the age of a grain, so each grain requires a morphometric correction or F_T correction based on mineral density and crystal geometry (Farley et al., 1996).

The temperature at which ^{4}He begins to be retained is termed the closure temperature (Tc), which is mineral dependent. Additionally, there is a temperature range below the closure temperature at which ^{4}He can be preferentially lost or retained based on kinetic variation of the grain, such as effective uranium concentration (eU) as a proxy for radiation damage, grain size (ESR) and parent nuclide zoning (Reiners et al., 2004; Hourigan et al., 2005; Dobson et al., 2008; Wolfe and Stockli, 2010; Guenthner et al., 2013). This temperature range is termed the partial retention zone (PRZ). For zircon the closure temperature is ~180°C and the partial retention zone is characterized between ~180°C and ~140°C (Reiners et al., 2004; Reiners, 2005; Stockli, 2005; Wolfe and

Stockli, 2010). At >200°C, ^{4}He is completely volume-diffused from zircon but partial retention can begin at temperatures as high as about ~200°C (Stockli, 2005).

These observations can be applied to geologic settings such as tectonic events which exhume rock samples from depth and high temperature through the PRZ and closure temperature. So that the age recorded by the grains is the timing of exhumation above ~180°C (Stockli, 2005). The PRZ becomes an important concept when studying an area that has gone through slow cooling. In this case, grains are within the PRZ temperature range for a greater amount of time and grain variability causes ^{4}He to be preferentially lost or retained and affects the ages obtained from these grains. Ages are determined by using the concentrations of ^{238}U, ^{235}U, and ^{232}Th, decay constants λ238, λ235 and λ232, and morphometric F_T corrections.

For each sample, a total of three to five grains were handpicked from each U-Pb age population, previously defined by zircon U-Pb analyses (see Chapter 2). The U-Pb dating technique involved LA-ICP-MS analysis of whole grains mounted on double-sided tape, to preserve complete and unpolished zircons before ZHe dating. In addition to (U-Th)/(Pb-He) double dating, this U-Pb depth profiling technique also quantifies zircon overgrowth and uranium and thorium zonation with depth, allowing for either a modified ejection correction (F_T correction) or for screening and exclusion of strongly zoned grains. Zircons were picked that were ideally euhedral with a width >70 μm. In cases where grains were <70 μm or rounded, the most euhedral and largest grains available were selected. Once selected individual grains are photographed and measured for standard morphometric a-ejection age corrections. Grains are then packed in acid-cleaned platinum foil tubes and diode laser heated for 10 minutes to ~1300°C to extract ^{4}He. All aliquots were reheated for 10 minutes at ~1300°C until ^{4}He yield dropped to <1%. After laser degassing, ^{4}He is analyzed in the ultra-high vacuum ^{4}He extraction line and the

$^{3}He/^{4}He$ ratio is determined. Subsequent to degassing, the zircon grains were then unpacked from platinum foil and dissolved to determine the concentrations of U, Th, and Sm by isotope dilution inductively coupled plasma mass spectrometry (ID-ICP-MS) analysis using an isotopically-enriched U and Th tracer. Dissolution was accomplished by standard U-Pb double pressure-vessel digestion procedures using hydrofluoric acid, nitric acid and hydrochloric acid in high pressure digestion vessels for a total of 4 days. Once dissolved, the spiked solutions were analyzed for U, Th and Sm concentrations using Thermo Element2 ICP-MS. Reported ages are alpha ejection corrected (F_T) using Helios software and errors (~8%, 2σ) are standard errors based on the reproducibility of the Fish Canyon Tuff standard (Reiners et al., 2002). Mineral separation and (U-Th)/He analyses were completed at the UTChron facilities at the Jackson School of Geosciences at the University of Texas at Austin.

Chapter 2: Provenance evolution during progressive rifting and hyper-extension using bedrock and detrital zircon U-Pb geochronology, Mauléon Basin, western Pyrenees

INTRODUCTION

Sediments at rifted and passive continental margins are important records of the progressive geologic and tectonic evolution of continental extension and break-up. This record can be used to reconstruct the temporal variations of the interplay between extensional tectonics and sedimentation, and provide a more complete understanding of the tectonic, climatic, thermal, and geomorphic evolution of continental rifted margins and their transition to passive margins. The processes that occur during continental extension, breakup, and margin development have long been debated and modeled based on observations of modern continental rifted margins, such as the Iberia-Newfoundland or NW Australian margins, exhumed fossil continental rifted margins, such as the ones in the eastern Alps or Corsica, and numerical models (Froitzheim and Eberli, 1990; Florineth and Froitzheim, 1994; Manatschal and Nievergelt, 1997; Driscoll and Karner, 1998; Whitmarsh et al., 2001; Pérez-Gussinyé and Reston, 2001; Huismans and Beaumont, 2002; Contrucci et al., 2004; Moulin et al., 2005; Lavier and Manatschal, 2006; Manatschal et al., 2007; Osmundsen and Ebbing, 2008; Aslanian et al., 2009; Péron-Pinvidic and Manatschal, 2009; Unternehr et al., 2010; Péron-Pinvidic and Manatschal, 2010; Perez-Gussinye, 2012; Beltrando et al., 2013; Peron-Pinvidic et al., 2013; Sutra et al., 2013; Tugend et al., 2014). These geological and numerical models have focused on the processes accommodating lithospheric break-up as well as the structural evolution during progressive strain localization from diffusive rifting, crustal necking, hyper-extension, mantle exhumation, and eventual lithospheric separation to sea

floor spreading. While this structural and geometric evolution has been elaborated upon, the spatial and temporal intricacies of tectonically controlled sedimentation and sedimentary provenance during progressive rifting have not been explored in depth.

Where preserved and exposed, these extensional systems offer a window that is typically unavailable, as the syn- and early post-rift sedimentary record of these margins are generally inaccessible due to submarine locations or burial by thick passive margin sediments, as exemplified at the Iberian-Newfoundland margin or in the Gulf of Mexico. This has limited tectonic sedimentation studies to reflection and refraction seismic surveys and/or sparse boreholes that frequently do not penetrate the syn-rift sedimentary sections within the necking domain or the distal rifted margin. On the other hand, fossil margins offer the unique opportunity to explore and characterize the complexities of the tectonic and stratigraphic evolution of hyper-extended margins, such as in the eastern Alps (Err-Ela or Tasna), but tend to be variably tectonized and overprinted, and often preserve only a fragmented or hard-to-reconstruct syn-rift basin record (e.g., Masini et al., 2012). In contrast, the Mauléon hyper-extended rift basin, which formed during Early Cretaceous hyper-extension of Iberian lithosphere, not only offers access to a relatively complete syn- to post-rift sedimentary record, but the degree of post-rift inversion and shortening related geometric and thermal overprinting seems to be relatively modest in the western Pyrenees and preserves the basic rift relationships (Teixell, 1998; Lagabrielle and Bodinier, 2008; Jammes et al., 2009; Masini et al., 2014; Tugend et al., 2014).

These properties make the Mauléon Basin an ideal locality for the reconstruction of syn- and post-rift sedimentation and the understanding of rift-related basin evolution and segmentation at hyper-extended rift margins through the combined application of bedrock and detrital zircon U-Pb techniques. While traditional provenance tools, including heavy mineral, bulk rock and/or QFL analyses, have long been used to

understand sediment sourcing, routing, and basin evolution; detrital zircon U-Pb analyses have evolved over the past decade into a powerful tool in process-oriented provenance analyses yielding additional critical constraints, such as the maximum depositional age, provenance, sediment dispersal patterns, drainage basin evolution, and characterization of strata and source terranes from various tectonic and geologic settings. While numerous studies have employed these techniques to focused on source-to-sink problems at passive margins and in intercontinental rifts (e.g., Cawood and Nemchin, 2000; Lamminen and Köykkä, 2010; Craddock et al., 2013; Lamminen et al., 2015), no systematic study has focused on a high-resolution interpretation of sedimentary provenance at hyper-extended continental rifted margins with the emphasis on source-to-sink changes during progressive rifting from diffuse extension to extreme crustal thinning and eventual mantle exhumation. Thus, this study presents both zircon U-Pb signatures for the western Pyrenean tectonic hinterland and pre-rift strata as well as a systematic detrital provenance analysis for syn- and post-rift strata from the South and North Mauléon sub-Basins. These are applied to understand the spatial and temporal variations in syn- and post-rift sedimentation and to provide constraints on the transition from diffusive rifting, to crustal necking, hyper-extension and eventual passive margin development during Cretaceous rifting in the western Pyrenees.

GEOLOGIC BACKGROUND

Regional geology

Continental extension, break-up, and seafloor spreading in the Bay of Biscay was accompanied by a propagating rift that caused hyper-extension of the crust in southwestern France and northern Spain prior to Pyrenean shortening in the region

(Lagabrielle and Bodinier, 2008; Jammes et al., 2009; Masini et al., 2014). One of these areas of hyper-extension was the Mauléon-Arzacq rift system, which is characterized by four separate domains (Masini et al., 2014). The northernmost domain is the Arzacq Basin, where the European continental crust beneath the basin shows progressive thinning and the sedimentary sequences show southward thickening approaching the area of Cretaceous hyper-extension (Teixell, 1990; Daignières et al., 1994; Biteau et al., 2006). To the South, the Grand Rieu high was a barrier between the Arzacq Basin and the Mauléon Basin until the end of active hyper-extension. The third domain is the Cretaceous Mauléon Basin (Figure 2-1), which formed over hyper-extended Iberian crust and can be subdivided into the North and South Mauléon sub-Basins. The Mauléon Basin is bound by fault zones to the east and west, by the Grand Rieu high to the north, and by the Axial domain (western equivalent of the Axial Zone of the central and eastern Pyrenees or the Pyrenean hinterland) to the south.

Stratigraphy

The stratigraphy of the Mauléon basin can be sub-divided into two groups: western Pyrenees pre-rift strata and basin fill strata (Figure 2-2). The western Pyrenees pre-rift units include mid-lower crustal granulites, Paleozoic metasediments, and late Paleozoic to early Mesozoic sediments. The basin fill units include syn-rift and post-rift sedimentary basin deposits. All of these units show thickness variations across the Mauléon Basin. Below is a brief description of these units; see Masini et al. (2014) for a detailed discussion of Mauléon Basin stratigraphy.

Vielzeuf (1984) identified two mid-lower crustal granulite units: the lower unit is a metabasic granulite and the upper unit is a quartzo-feldspathic metasedimentary granulite with a Cambrian to Ordovician aged protolith (Boissonnas et al., 1974). Both of

these units underwent granulite facies metamorphism during the Variscan Orogeny with peak temperatures and pressures of 775±50°C and 6±0.5 kbars (Masini et al., 2014 and references therein). Reported $^{40}Ar/^{39}Ar$ biotite ages indicate that these strata had been exhumed to middle crustal depths of ~10 km by the late Triassic to early Jurassic (Masini et al., 2014). Stratigraphically above the granulites are Paleozoic sedimentary strata (Figure 2-2) that underwent low-grade anchizonal to lower greenschist facies metamorphism during the Variscan Orogeny (Heddebaut, 1973).

The deformed and metamorphosed lower Paleozoic strata are overlain by undeformed Permian conglomerates, sandstone, silts and pelites, and Triassic deposits of Buntsandstein, consisting of shales, sandstones and conglomerates as shown in Figure 2-2 (Curnelle, 1983; Fréchengues, 1993; Masini et al., 2014). Late Triassic transgressions deposited Muschelkalk platform carbonates, which were capped by Keuper evaporates and a second carbonate platform. These deposits are cut by a major erosional unconformity due to a late Jurassic regression (Curnelle, 1983; Fréchengues, 1993; Masini et al., 2014). The final pre-rift deposits are Barremian-to-lower-Aptian carbonates and marls (Masini et al., 2014).

Mauléon Basin syn-rift deposition (Figure 2-2) began with Upper Aptian and Albian carbonates and marls (Masini et al., 2014). Towards the Axial domain, these grade into Albian and Cenomanian delta-derived siliciclastic turbidites and conglomerates (Boirie and Souquet, 1982). These megasequences and flysch were deposited concurrently and diachronously in the South and North Mauléon sub-Basins as rifting occurred (Souquet et al., 1985; Masini et al., 2014). Post-rift deposition (Figure 2-2) began in the Cenomanian as siliciclastic sedimentation ended with another transgression that covered the Axial domain, leading to deposition of platform carbonates in a calciturbiditic and hemipleagic system (Masini et al., 2014).

Structural setting

The Mauléon Basin sediments were deposited over western Pyrenean moderate-grade metamorphic thrust sheets and lower amphibolite-to-granulite facies basement; which were metamorphosed and deformed during the collision of Gondwana and Baltica-Laurentia in the Variscan Orogeny (Matte, 1986; Ziegler, 1990). Orogenic collapse and the northward propagation of the Atlantic rift allowed for Jurassic to Early Cretaceous marine incursions prior to the initiation of Cretaceous rifting in the Late Aptian (Jammes et al., 2009; Masini et al., 2014). The opening of the South Mauléon sub-Basin was accommodated by the South Mauléon Detachment (SMD), which exhumed upper crustal Paleozoic section as shown in Figure 2-1 (Masini et al., 2014). From the Albian to Cenomanian the Axial domain and the Jara-Arbailles ridge were the southern and northern extents, respectively, of the South Mauléon sub-basin (Boirie and Souquet, 1982; Souquet et al., 1985; Claude, 1990; Masini et al., 2014). The current model envisions that from the Late Aptian to Lower Albian progressive strain accommodating crustal thinning was transferred from the SMD along a mid-crust decollement to the mid- and lower-crust of the Arzacq Basin, leading to an asymmetric rift geometry (Masini et al., 2014).

In the mid-Albian the locus of extension shifted northward with the inception of the North Mauléon Detachment (NMD), forming the North Mauléon sub-Basin (Jammes et al., 2009; Masini et al., 2014). The Jara-Arbailles ridge became a breakaway block separating the South and North Mauléon sub-Basins (Figure 2-1). Based on cross-cutting relations the NMD was active during the deposition of the second megasequence and exhumed the already thinned middle to lower crust and mantle (Boirie and Souquet, 1982; Jammes et al., 2009; Masini et al., 2014). Due to lack of exposure of the

stratigraphic record, Masini et al. (2014) notes that it is difficult to determine the cessation of activity along the NMD.

During Pyrenean orogenesis a total of about 75-80 km of shortening occurred in the west-central Pyrenees between the Late Cretaceous and early Miocene at an average rate of 1.2 mm/yr (Teixell, 1998). Balanced cross sections and surface structure restorations show that the amount of shortening decreases from east to west (Seguret and Daignieres, 1986; Teixell, 1998). In the western Pyrenees, shortening caused the Mauléon Basin to be partially inverted as a tectonic pop-up block. The North Pyrenean Frontal thrust system to the north of the Mauléon Basin and the Igountze-Mendibelza or Lakora thrust to the south of the Mauléon Basin accommodated most of this shortening as the basin was thrust northward over the former Grand Rieu high and Arzacq domains and southward onto the Axial domain (Casteras, 1969; Teixell, 1990; Muñoz, 1992; Daignières et al., 1994; Teixell, 1998). Masini et al. (2014) notes that within the Mauléon Basin these thrust systems cut through the basement and east of the basin the thrusts cut the sedimentary cover. They interpret that this may cause more of the deformation to be accommodated at a deeper crustal level in the Mauléon Basin allowing for greater preservation of pre-, syn- and post-rift structures as compared to the central and eastern Pyrenees.

ZIRCON U-PB SAMPLING STRATEGY AND METHODOLOGY

The Mauléon Basin is one of the few hyper-extended rift basins that provides access to outcrops of syn- and post-rift strata, exhumed upper and lower crustal sections, and serpentinized lithospheric mantle, as well as faulting geometries. However, it is unclear how the stratigraphic record is related to the progressive geometric evolution of this hyper-extended rift margin. In conjunction with detailed bedrock age signatures from

the source areas in the western Pyrenees, detrital zircon U-Pb geochronology can be used to constrain the sediment provenance, sediment routing, and basin/sub-basin evolution during the progressive evolution of the Mauléon Basin. By systematically defining the detrital zircon signatures Paleozoic to Mesozoic pre-rift strata, it is possible to fingerprint and deconvolve the detrital zircon signature of basin deposits during progressing margin evolution and to reconstruct the lateral and temporal variations in sedimentation within and between structural domains and sub-basins during rifting. In the western Pyrenees, the detrital source areas of the Mauléon Basin include the hinterland and proximal rift domain of the Pyrenean Axial domain, the necking domain of the Mendibelza and South Mauléon sub-Basin, the hyper-thinned domain of the North Mauléon sub-Basin, and the limited exhumed mantle domain (Tugend et al., 2014; Masini et al., 2014).

Detrital zircon analysis has developed into a widely used and powerful tool in detrital provenance studies. This technique involves measuring the concentrations of ^{238}U, ^{235}U and ^{232}Th, as they decay to their respective stable Pb isotopes, and using parent-daughter ratios of these isotopes for age determination (Faure, 1998; Davis et al., 2003). There are numerous techniques and applications that have been developed based on zircon U-Pb age determination (Gehrels, 2014 and references therein). This study applies these techniques to determine the detailed margin sedimentological evolution during progressive rifting through hyper-extension using laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) techniques in order to determine the zircon age populations for the western Pyrenean pre-rift and basin strata.

Zircon was isolated from a total of 47 samples (Appendix A) by conventional mineral separation, including crushing, grinding, water table concentration, heavy-liquid density, and magnetic susceptibility separation techniques. Whole and unpolished zircon grains were sprinkled onto low lead double sided tape on 1 inch epoxy resin mounts. At

least 120 zircon grains were chosen at random to be analyzed to obtain a statistically robust dataset (Vermeesch, 2004). GJ1 was used as the primary reference standard and Pak 1 and Plesovice were used as secondary reference standards. The analyses were completed using a PhotonMachine Analyte G.2 Excimer laser with a large-volume Helex sample cell and analyzed with an Element2 ICP-MS. A ~30 μm wide and about ~16 μm deep pit was ablated on the flat face of the non-polished zircons perpendicular to the long axis of the grain, which allows for depth profiling of the grain. This technique enables the analysis of multiple zircon growth events evident in core and rim ages (Stockli and Stockli, 2013). To obtain bedrock and detrital U-Pb ages for the samples, the data from the analyses were then reduced using the Iolite data reduction software and VizualAge (Paton et al., 2011; Petrus and Kamber, 2012). For increased precision the ages presented use $^{206}Pb/^{238}U$ ages for grains younger than 1.2 Ga and $^{207}Pb/^{206}Pb$ ages for grains older than 1.2 Ga (Gehrels et al., 2008b). All ages reported use 2σ absolute propagated uncertainties are less than 10% discordant (Gehrels, 2011). Mineral separation and LA-ICP-MS analyses were completed at the UTChron facilities at the Jackson School of Geosciences at the University of Texas at Austin.

RESULTS

Zircon was separated from a total of 47 samples and other than two felsic granulite samples from the Labourd massif (Figure 2-4), all of the zircon LA-ICP-MS U-Pb ages were obtained from metasedimentary and sedimentary samples. These detrital zircon (DZ) U-Pb analyses are displayed as kernel density estimation plots (KDE, Vermeesch, 2012). All the collected data are shown as KDEs in figures 2-3 and 2-7 and tabulated in Appendix A. The subsequent data sections focus primarily on DZ ages

<1,200 Ma, as that is age range where the most diagnostic variations in age signatures are observed and the aim of the bedrock DZ analyses is to identify diagnostic age populations in each of the pre-rift strata to ultimately fingerprint the provenance in syn- and post-rift strata. Residual DZ ages >1,200 Ma, which make up only ~15-25% of the total DZ populations, generally do not show distinct age signature variations that would be useful in discerning the DZ age signatures of syn- and post-rift basin samples.

Western Pyrenees pre-rift strata zircon U-Pb

To reconstruct the basin evolution of the Mauléon-Arzacq rift system by DZ U-Pb analysis of syn- and post-rift strata, it is crucial to first systematically characterize the bedrock source terranes. For this purpose, a total of 32 samples were analyzed to identify the western Pyrenees pre-rift strata signatures, including nine granulite samples, 19 samples from Paleozoic units metamorphosed during the Variscan orogeny, and four samples from the post-Variscan late Paleozoic to early Mesozoic pre-rift strata. These results are presented in stratigraphic/chronological order and displayed as KDE plots (Figure 2-3).

Mid-lower crustal granulites

Nine granulite samples from the Labourd Massif were analyzed to define the DZ signature of the mid-lower crustal units exposed in the distal hyper-thinned domain of the northern Mauléon Basin (Figure 2-1, 2-3 and 2-4A). The granulites of the Labourd Massif can be subdivided in terms of their protolithic composition into orthogneissic and paragneissic granulites. A total of ~200 zircon U-Pb ages were obtained from orthogneissic granulite samples 12WPY08 and 12WPY48 and only display a single magmatic age population (Figure 2-3 and 2-4). Samples 12WPY08 and 12WPY48 yield

concordant mean U-Pb ages of 279.2±2.2 Ma and 274.1±1.8 Ma, respectively, with only minor inheritance cores (Figure 2-4).

A total of 923 U-Pb ages were obtained from seven paragneissic granulite samples which display multi-modal detrital age populations (Figure 2-4A and 2-5). All of these samples (except 12WPY12) show distinct zircon rims similar to the orthogenissic magmatic zircons (Figure 2-4A and 2-5). The zircon overgrowth ages (n=378) cluster around ~295 Ma. Given their paragneissic detrital nature, samples 12WPY12, 12WPY18, and 13WPY05 show a significant DZ populations of core ages that ranges from 453 to 778 Ma (n=325, 35%) with a distinct age peak age of ~590 Ma. Sample 12WPY12 shows a significant secondary core population that ranges from 806 to 1071 Ma (n=60, 7%) and has a peak age of ~955 Ma.

Paleozoic metasedimentary strata

A total of 19 samples from the Paleozoic meta-sedimentary units, metamorphosed during the Variscan orogeny, were analyzed to define the DZ signatures of these strata in the necking and hyper-thinned domain of the Mauléon Basin. Fifteen Ordovician, three Devonian, and one Carboniferous sample were analyzed yielding 1,834, 378, and 139 individual DZ U-Pb ages, respectively (Figure 2-3). The individual sample KDE plots for each stratigraphic interval (Figure 2-3) are combined into a single KDE to illustrate the stratigraphic interval zircon U-Pb signature (Figure 2-6).

Of the 15 Ordovician samples, five were collected from Mt. Monoa in the distal necking domain, one near the base of Mt. Jara in the proximal hyper-thinned domain, seven from Mt. Baygoura in the hyper-thinned domain, and two from Pic de Garralda in the distal hyper-thinned domain (Figure 2-1). All samples were collected from greenschist to amphibolite facies metasediments. All Ordovician samples exhibit two

distinct DZ U-Pb age populations (Figure 2-6), with one population ranging from 521 to 748 Ma (n=678 ages, 37%) with an age peak of ~626 Ma and a second population ranging from 850 to 1189 Ma (n=480 ages, 26%) with an age peak age of ~994 Ma. Only one sample, 12WPY42, from Mt. Baygoura shows a significant deviation in DZ age spectrum with an additional age population that ranges from 423 to 497 Ma (n=29 ages, <1%) and an age peak age of ~470 Ma (Figure 2-3).

Two Devonian samples were collected from Mt. Monoa in the distal necking domain and one near the base of Mt. Jara in the proximal hyper-thinned domain (Figure 2-1). All samples were all collected from greenschist to amphibolite facies metasediments and show two distinct age populations (Figure 2-6). One of these populations ranges from 525 to 731 Ma (n=125 ages, 33%) and has a peak age of ~675 Ma. The other population ranges from 846 to 1187 Ma (n=100 ages, 27%) and has a peak age of ~999 Ma. These samples also show a less prominent population that ranges from 740 to 834 Ma (n=38 ages, 10%) with a peak age of ~768 Ma.

The single Carboniferous sample was collected from greenschist facies metasediments in the Mendibelza area in the proximal necking domain (Figure 2-1). This sample shows three distinct age populations (Figure 2-6). One of these populations ranges from 267 to 364 Ma (n=22 ages, 16%) and has a peak age of ~334 Ma. The second population ranges from 399 to 509 Ma (n=26 ages, 19%) and has a peak age of ~472 Ma. The third population ranges from 526 to 734 Ma (n=49 ages, 35%) and has a peak age of ~610 Ma. This sample also has two less prominent populations. The first ranges from 767 to 847 Ma (n=9 ages, 7%) and has a peak age of ~801 Ma. The second ranges from 904 to 1134 Ma (n=19 ages, 14%) and has a peak age of ~998 Ma.

Late Paleozoic to early Mesozoic pre-rift sediments

A total of four samples from un-metamorphosed (post-Variscan) late Paleozoic to early Mesozoic pre-rift strata were analyzed to define the zircon signature of these strata in the necking and proximal hyper-thinned domain. One Permian and three Triassic samples were analyzed yielding 117 and 368 individual DZ U-Pb ages, respectively (Figure 2-3). The individual sample KDE plots for each stratigraphic interval are combined into a single KDE to illustrate the stratigraphic interval DZ U-Pb signature (Figure 2-6).

The single Permian sample was collected from sandstone interbedded with conglomerates near the top of Mt. Hautza (Figure 2-1). This Permian sample shows three distinct DZ age populations with one of these populations ranging from 275 to 373 Ma (n=13 ages, 11%) with a DZ age peak of ~300 Ma, a second population ranging from 531 to 727 Ma (n=43 ages, 37%) with a DZ age peak of ~606 Ma, and a third population ranging from 739 to 883 Ma (n=19 ages, 16%) with a DZ peak age of ~780 Ma. This sample also has another less prominent population that ranges from 940 to 1027 Ma (n=11 ages, 9%) with a DZ age peak of ~1002 Ma (Figure 2-6).

Two Triassic samples were collected from sandstone, one near the base and one near the top of Mt. Jara, in the proximal hyper-thinned domain. A third sample was collected from sandstone near the top of Mt. Hautza (Figure 2-1). These samples show one significant age populations in the Triassic U-Pb signature KDE (Figure 2-6). This population ranges from 534 to 719 Ma (n=168 ages, 46%) and has a peak age of ~597 Ma. These samples also display three minor age populations (Figure 2-6). One of these populations ranges from 263 to 388 Ma (n=15 ages, 4%) and has a peak age of ~328 Ma. The second population ranges from 437 to 512 Ma (n=22 ages, 6%) and has a peak age of

~475 Ma. The third population ranges from 751 to 847 Ma (n=15 ages, 4%) and has a peak age of ~769 Ma.

Detrital Zircon U-Pb ages from the proximal to distal Mauléon Basin

A total of 15 DZ samples were analyzed from syn- and post-rift strata across the Mauléon Basin and its different rift domains to constrain spatial and temporal variations in sediment provenance during progressive rifting and hyper-extension. The DZ U-Pb results are presented systematically from the proximal to distal domains of the Mauléon hyper-extended margin and all ages obtained are displayed in KDE plots (Figure 2-7).

Proximal necking domain

The seven samples from the Mendibelza area characterize the syn- to post-rift stratigraphic evolution of the proximal necking domain (Figure 2-1 and 2-7). These samples stratigraphically transition from the Albian Spicula Marls formation (n=1) to Albian to Cenomanian turbidites (n=1), conglomerates (n=4) and sandstone (n=1), up-section. The DZ analyses show five distinct age peaks (Figure 2-8): ~311 Ma (n=142 ages, 16%), ~469 Ma (n=89 ages, 10%), ~606 Ma (n=326 ages, 37%), 801 Ma (n=46 ages, 5%), and 961 Ma (n=128 ages, 15%). These age peaks represent five populations, respectively: Permian-Carboniferous, early Paleozoic, Ediacaran-Cryogenian, Tonian, and Tonian-Stenian.

DZ provenance signatures exhibit systematic shift provenance shifts from Albian through Cenomanian times (Figure 2-8). The Permian-Carboniferous population increases in abundance from ~5% to ~37% with minor fluctuations and then decreases to ~30% in the stratigraphically highest sample. While the early Paleozoic population stays at a relatively constant abundance (~7%) until increasing to ~24%. The Ediacaran-Cryogenian population shows the highest abundance of any of the populations but though

time shows a decrease in abundance from ~50% to ~33%. The Tonian population is consistently the least abundant population which stays at a relatively constant abundance < 10%. The Tonian-Stenian population shows a decrease in abundance from 27% to less than 10% with minor fluctuations. Overall the samples from the Mendibelza area indicate a general increased amount of younger zircon populations and a decrease in the older populations during Albian to Cenomanian deposition.

Distal necking domain

Due to limited exposure and preservation of the South Mauléon sub-Basin, only one sample was collected and analyzed from sandstones at the base of Mt. Monoa to characterize the syn-rift deposition in the distal necking domain (Figure 2-1 and 2-7). Here there are only three main age peaks (Figure 2-7 and 2-8): 645 Ma (n=48 ages, 40%), 786 Ma (n=11 ages, 9%), and 995 Ma (n=23 ages, 19%). These age peaks represent three main populations, respectively: Ediacaran-Cryogenian, Tonian, and Tonian-Stenian.

Hyper-thinned domain

The seven samples from the North Mauléon sub-Basin characterize the hyper-thinned domain (Figure 2-1 and 2-7). These samples were collected from Albian to Cenomanian sediments near the Abarratia quarry (n=2), Cenomanian to Turonian turbidites (n=3), Cenomanian to Turonian sandstone (n=1) and Coniacian to Santonian conglomerate (n=1). Similar to samples from the Mendibelza area and the South Mauléon sub-Basin, DZ analysis indicates five main age peaks as shown in Figure 2-8: 325 Ma (n=195 ages, 23%), 485 Ma (n=90 ages, 11%), 617 Ma (n=259 ages, 31%), 776 Ma (n=40 ages, 5%), and 980 Ma (n=121 ages, 15%). These age peaks represent five populations, respectively: Permian-Carboniferous, early Paleozoic, Ediacaran-Cryogenian, Tonian, and Tonian-Stenian.

In the Albian to Cenomanian the Permian-Carboniferous population dramatically increases in abundance from ~34% to ~70%. In the Cenomanian this population then decreases in abundance to ~15% before increasing to ~29% in the Turonian and finally decreasing to ~4% in the Coniacian to Santonian. The early Paleozoic population indicates a decrease in abundance from ~12% to ~7 from the Albian to Cenomanian, an increase to ~21% from the Cenomanian to Turonian and finally decreases to ~8% in the Coniacian to Santonian. The Ediacaran-Cryogenian population decreases from ~35% to ~17% from the Albian to the Cenomanian and increases to ~44% in the Cenomanian. In the Turonian this population decreases again to ~30% before increasing to ~51% in the Coniacian to Santonian. The Tonian population abundance is consistently ~ <10%. The Tonian-Stenian population decreases in abundance from ~12 to ~4% in the Albian to Cenomanian and later in the Cenomanian the abundance increases to ~27%. This population then begins to decrease from the Cenomanian to Turonian to ~14% and increases again to ~33% in the Coniacian to Santonian.

DISCUSSION

The DZ U-Pb signatures from the pre-rift strata give insights into the tectonic and provenance evolution of the western Pyrenees during Paleozoic deposition, Variscan metamorphism and pre-rift sedimentation. The evolution of these signatures are then applied to the syn- and post-rift DZ analyses to interpret and reconstruct basin evolution during progressive rifting. These findings are then used to construct a basin evolution model for hyper-extended rift margins from diffuse extension to crustal necking, and hyper-extension.

Defining bedrock provenance signatures

In addition to the diagnostic age populations that indicate certain pre-rift intervals, there are also non-diagnostic age populations that are present throughout all of the pre-rift intervals, except the orthogneissic granulites. Though the population age range and peak age vary some between samples and between intervals, all of the pre-rift samples share non-diagnostic peak ages at ~615 Ma, ~780 Ma, and ~1000 Ma. The two most prominent age populations throughout all of the samples are the ~615 Ma and the ~1000 Ma populations (Figure 2-5). These zircon populations were recycled throughout the Paleozoic metasedimentary and pre-rift sedimentary units producing these common signatures.

While these age populations are non-diagnostic in characterizing pre-rift strata signatures, they are diagnostic in determining the provenance of the pre-rift units. These detrital zircon populations are similar to those that are found in Ediacaran to Carboniferous age deposits throughout parts of Iberia (Fernández-Suárez et al., 2002b; Bea et al., 2010; Fernández-Suárez et al., 2013; Gutierrez-Alonso et al., 2015). This agrees with the western Pyrenees being part of the Iberia plate and sharing a common pre-rift evolution throughout much of the Late Neoproterozoic and into the Paleozoic. Recently published works have interpreted these detrital zircon signatures to have originated from the East African Orogen, northern Egypt and the Sinai Peninsula; which places Iberia, and consequently the western Pyrenees, much closer to eastern Gondwana than previously expected (Fernández-Suárez et al., 2002b; Bea et al., 2010; Fernández-Suárez et al., 2013; Gutierrez-Alonso et al., 2015).

Mid-lower crustal granulites

The key diagnostic age peaks for the ortho- and paragneissic granulites from the Labourd massif are ~274-279 Ma and ~295 Ma, respectively (Figure 2-4). For the

orthogneissic granulites this magmatic age population defines early to middle Permian zircon crystallization, which is within the 304 Ma to 266 Ma range established by Pereira et al. (2014) based on zircon U-Pb analyses from the southern Pyrenees, indicating that these plutons are related to the Variscan Orogeny magmatism. In the paragneissic granulites this age population (~295 Ma) represents a zircon rim age (Figure 2-4A). Due to the crystallization temperature of zircon and that all but one sample shows these rims, it is clear that granulite-facies metamorphism was widespread throughout the Labourd massif during the Variscan Orogeny.

We also observe two separate trends from the zircon inherited core ages. The first trend is seen in the one paragneiss sample that does not display the ~295 Ma age population (Figure 2-4A). This sample has significant peak ages at ~480 Ma, ~600 Ma, and ~955 Ma which are similar to the peak ages found in the Ordovician strata samples (Figure 2-6). This implies that the protolith for theses samples may have been deposited during the Ordovician and later underwent metamorphism during the Variscan Orogeny. The other six paragneiss samples in Figure 2-4A, show a less abundant ~615 Ma population and are lacking the ~1000 Ma age population. Due to the growth of the Variscan-aged rim, it is possible that the ~16 μm ablation pit is not deep enough in the zircon to penetrate the inherited cores and this is why there is a decrease in the abundance of these ages. Another possibility is that the protolith of these six samples may not be from an Ordovician age unit but instead from a Cambrian unit (Boissonnas et al., 1974). Fernández-Suárez et al. (2013) notes a lack of the ~1000 Ma population in some Cambrian age units in Northern Iberia but since no Cambrian samples were analyzed from the western Pyrenees pre-rift strata it is possible that the Cambrian samples in this area may also lack this ~1000 Ma population but additional analysis from Cambrian samples from the Pyrenees would be needed to verify this.

Paleozoic metasedimentary strata

Most of the samples from Ordovician and Devonian age metasedimentary units show little variation in the detrital zircon signature between samples and only display two distinct age populations at ~625 Ma and ~1000 Ma, which are non-diagnostic populations. Only one Ordovician metasedimentary sample shows a diagnostic age population at ~470 Ma (Figure 2-3). These zircons are interpreted to be from magmatism that occurred during the transition from the Cadomian Orogeny to the Variscan Orogeny (Deloule et al., 2002; Cocherie et al., 2005; Castiñeiras et al., 2008; Denele et al., 2009; Gutierrez-Alonso et al., 2015). Exposures of these igneous bodies can currently be found in the eastern Axial zone and also north of the North Pyrenean fault (Whitchurch et al., 2011).

Many of the same non-diagnostic age populations (~610 Ma, ~800 Ma, and ~1000 Ma) are present in the Carboniferous units, likely due to the recycling of sediments during the Variscan Orogeny. These units also display two diagnostic age populations in addition to the non-diagnostics age peaks. The first diagnostic population, one of the most abundant populations, has an age peak ~472 Ma. The only other unit that this age population is observed in is the Ordovician metasedimentary unit (Figure 2-3 and 2-6). A possible explanation for these grains being deposited in the Carboniferous unit would be exhumation of Ordovician units during the Variscan Orogeny and recycling of these grains into the Carboniferous unit. The second diagnostic population has a peak age of ~330 Ma (Figure 2-6), taken here to be the depositional age of the unit, which were likely derived from Variscan volcanism (Innocent et al., 1994; Schaltegger et al., 1996; Filleaudeau et al., 2012; Denele et al., 2014; Pereira et al., 2014). By the end of the Carboniferous the Variscan Orogeny had come to an apex in the western Pyrenees with volcanic activity occurring near the end of the Carboniferous and into the Permian as well

as the low grade anchizonal to lower greenschist facies metamorphism of Ordovician through the Carboniferous units (Heddebaut, 1973).

Late Paleozoic to early Mesozoic pre-rift sediments

While the Permian sample shares many of the same non-diagnostic age populations with the Carboniferous sample (~606 Ma, ~780 Ma, and ~1002 Ma), it completely lacks the ~472 Ma DZ population which indicates that the Carboniferous units are not being recycled into the Permian strata (Figure 2-6), instead the source terrane must be composed of non-diagnostic populations such as in the Ordovician and Devonian strata. The only diagnostic population for this unit is the ~300 Ma age population (Figure 2-6). These zircons are interpreted to be sourced from late Variscan volcanic activity which out crops in the southern Pyrenees (Lago et al., 2004 and references therein).

One of the diagnostic aspects of the Triassic strata is the significant decrease in abundance of ~300 Ma and ~330 Ma populations observed in the Permian and Carboniferous units, respectively, which indicates minimal recycling of these units into the Triassic strata (Figure 2-6). The second diagnostic population is a minor ~475 Ma population that is only found in the Carboniferous and Ordovician units, which may also indicates a minimal recycling from these units as well.

Mauléon Basin proximal to distal detrital zircon data

With the signatures of the western Pyrenees pre-rift strata characterized it is now possible to use the diagnostic age populations in these units to interpret the Mauléon Basin detrital zircon data. The significant age peak variations in the DZ signatures of syn- and post-rift sediments from the proximal necking domain to the distal hyperthinned

domain of the North and South Mauléon sub-Basin are used to determine the syn- to post-rift basin evolution.

The Mendibelza transect crosses the Albian to Cenomanian proximal necking domain and the syn- to post-rift deposits clearly show a classic unroofing sequence (Figure 2-8). Due to the presence of significant ~600 Ma and ~960 Ma and lack of ~300 Ma DZ populations in the stratigraphically lowest Albian syn-rift samples, the source terrane for these samples is likely Paleozoic to early Mesozoic strata such as Ordovician, Devonian and/or Triassic units (Figure 2-6 and 2-8). Up-section, these samples show a significant increase in abundance of the Permian-Carboniferous population as the Ediacaran-Cryogenian and Tonian-Stenian populations generally decrease (Figure 2-8 and 2-9). This up-section variation in basin deposits as rifting progresses during the Albian to Cenomanian can be accounted for by the addition of a source terrane with ample ~300 Ma ages while the Paleozoic source terrane becomes buried or depleted. In the proximal and necking domains, only Variscan plutons that are present throughout the Pyrenean Axial Zone in the central and eastern Pyrenees have been dated at ~300 Ma (Denele et al., 2014). Therefore the Permian-Carboniferous population in the Albian to Cenomanian deposits in the Mendibelza area may have been sourced from similar Variscan plutons that continued west into the Axial domain of the Western Pyrenees, which are no longer exposed or have been completely eroded. This implies that throughout much of the Albian to Cenomanian, during the evolution from syn- to post-rift, the proximal necking domain is sourced regionally from Axial domain plutons rather than locally from Paleozoic to early Mesozoic strata.

Due to limited exposure and preservation of the South Mauléon sub-Basin or distal necking domain, only one Albian sample was collected and analyzed (Figure 2-8). While South Mauléon sub-Basin sediments were deposited synchronously with Albian

deposits from the Mendibelza transect, the sample from the South Mauléon sub-Basin lacks the Permian-Carboniferous population that is prevalent throughout the Mendibelza transect (Figure 2-8). This indicates that during the Albian hyper-extension, the South Mauléon sub-Basin was isolated and disconnected from the Mendibelza basin which strongly suggests local sourcing of fault-controlled sub-basins and that the South Mauléon sub-Basin was sourced from the metamorphosed Paleozoic units exposed in the immediate footwall of the SMD.

The North Mauléon sub-Basin represents the hyper-thinned domain that is characterized by syn- and post-rift sedimentation from the Albian to the Coniacian/Santonian (Figure 2-8). As in the Mendibelza transect, these samples show a progressive tectonic unroofing sequence (Figure 2-8 and 2-9). During Albian hyper-extension the Permian-Carboniferous population dominates the DZ signature. However, since the South Mauléon sub-Basin separates the North Mauléon sub-Basin from Mendibelza and lacks this age population, these zircons clearly cannot be the same ~300 Ma Variscan aged zircons that are observed in the Mendibelza Albian deposits (Figure 2-8). Therefore there must be another ~300 Ma source, which indicates that the Labourd massif mid-lower crustal granulites had to have been exhumed to the surface during the Albian to Cenomanian to be locally deposited in the North Mauléon sub-Basin syn-rift units. From the Cenomanian to the early Turonian the abundance of the granulite syn- to post-rift deposition decreases from a maximum of 70% to 15% (Figure 2-8 and 2-9). This indicates that as rifting progressed the fault-controlled sub-basins became increasingly sourced from a terrane composed of mainly an Ediacaran-Cryogenian population, likely a Triassic, Devonian and/or Ordovician unit based on the defined DZ signatures (Figure 2-6 and 2-8). As the granulites continued to have been buried by syn- to post-rift deposition in the North Mauléon sub-Basin, in the late Turonian deposition became reintegrated

between sub-basins. This is demonstrated by the Permian-Carboniferous population increasing again to 29% as sediments were likely sourced regionally from the Axial domain Variscan plutons in the hinterland which also display ~300 Ma ages (Figure 2-8 and 2-9).

In Figure 2-9, the stratigraphically highest samples analyzed from proximal Mendibelza Cenomanian strata and the distal North Mauléon sub-Basin Santonian/Coniacian strata exhibit a decrease in the ~300 Ma by 7% and 25%, respectively. This indicates a shift in post-rift regional source terranes, less abundant in Permian-Carboniferous ages, which is diachronously deposited across the hyper-extended rift margin. One explanation for this shift in source terrane could be the post-rift transgression that covered the Axial domain terranes, that had supplied syn-rift sediments, and altered the post-rift sediment source for the basin. Based on the signatures obtained in this study, the new post-rift source could potentially be Mesozoic to Paleozoic pre-rift units including Triassic, Devonian and/or Ordovician strata (Figure 2-6 and 2-8). Jointly or alternatively, the source shift could be a product of early Pyrenean orogensis beginning in the Late Cretaceous affecting the Axial domain of the western Pyrenees. Whitchurch et al. (2011) points to regional orogen-parallel east to west sediment routing during initial orogenesis in the central and eastern Pyrenees from the Late Cretaceous to Paleogene. Maastrichtian strata in the south-central Pyrenees display similar abundant early Paleozoic to late Proterozoic populations with minimal Permian-Carboniferous populations which indicates recycling of early Paleozoic strata (Whitchurch et al., 2011), similar to what is observed in the oldest analyzed Cretaceous Mauléon Basin sample (Sample 12WPY07, Figure 2-8 and 2-9). So if the western Pyrenees was also affected by initial orogenesis, it is possible that the source terrane for

these sediments may be recycled early Paleozoic strata connected with east to west axial drainage in the Late Cretaceous.

Hyper-extended margin sediment dispersal model

These new constraints on the stratigraphic and sedimentary provenance evolution of the Mauléon Basin can be integrated with models for the development of hyper-extended margin structural domains to reconstruct the evolution and architecture of basins and structural domains at magma-poor hyper-extended continental margins. The DZ U-Pb signatures of Paleozoic and Mesozoic strata deposited prior to Cretaceous extension document continual recycling of metasedimentary rocks of Gondwanan affinity with little variation. While the timing of diffuse and protracted extension is difficult to determine, the DZ U-Pb signatures indicate a dominance of regional sourcing through the Triassic without any major provenance shifts or significant fault-controlled local sourcing. During progressive strain localization and the onset of crustal necking, provenance was characterized by an abrupt transition to locally derived sediment within individual structurally-controlled sub-basins and an up-section transition back to regionally based hinterland-derived sedimentation in the proximal necking domain. In the Mauléon Basin this was described in the proximal necking domain of the Mendibelza area by Albian early syn-rift sediments being derived locally from Paleozoic to early Mesozoic strata with an increasing input of regionally sourced sediments derived from Variscan plutons of the Axial domain of the western Pyrenean hinterland (Figure 2-10, gray arrow). As strain continued to localize and the necking and hyper-thinned domains developed, sedimentation in fault-controlled sub-basins were locally sourced from immediate exhumed footwall units and appear to be isolated from hinterland derived sediment supply. This manifests itself in the distal necking domain in the South Mauléon

sub-Basin by Albian strata being sourced from metamorphosed Paleozoic units sourced from the immediate footwall of the SMD and in the hyper-thinned domain of the North Mauléon sub-Basin by Albian to Cenomanian strata being sourced locally from exhumed granulitic-facies mid-lower crust (Figure 2-10, white arrows). As rifting progresses, these distal isolated sub-Basins are filled by progressively more regional sourced syn- and post-rift sediments until these sub-basins become reintegrated and hinterland-derived sediments spill into the distal necking domain and eventually the hyper-thinned domain. This fill-and-spill integration of sub-basins can be observed in the diachronous evolution of the Mendibelza area and the North Mauléon sub-Basin. Where Albian to Cenomanian deposits in the Mendibelza area were isolated and did not reach the distal hyper-extended domain of the North Mauléon sub-Basin until the Cenomanian to Turonian (Figure 2-10, black arrows). Based on provenance data it is not possible to differentiate late syn-rift from post-rift strata as the transition is gradual and not abrupt. During the late syn- to post-rift sedimentation, provenance returns to a regionally-sourced, hinterland-dominated sediment supply until it the region becomes influenced by subsequent events. As shown by the possible influence of initial Pyrenean orogenesis or transgression on the post-rift deposition of Cenomanian strata at Mendibelza that wasn't deposited in the North Mauléon sub-Basin until the Coniacian/Santonian.

The generalities of this sediment dispersal model from the Pyrenees give insight into observations that are transferable to other hyper-extended margin basins. The model indicates that during the early stages of rifting, while extension is diffuse, there is little to no change in provenance but once crustal necking begins an abrupt change occurs. At this stage of rifting the proximal and distal parts of the margin are isolated from hinterland sedimentary supply and locally sourced. During the progression from syn- to post-rift the proximal margin has an increase in hinterland sedimentary supply, as the sub-basins fill-

and-spill they become reintegrated as the margin transitions to a passive continental margin. These observations can be compared to other rifted and hyper-extended margins that show similarities as they indicate the syn-rift formation of locally sourced sub-basins which are filled and reintegrated (Nottvedt et al., 1995; Anderson et al., 2000; Mohn et al., 2010; Masini et al., 2013).

CONCLUSIONS

The Mauléon Basin is a unique opportunity to apply DZ U-Pb provenance techniques to an exhumed fossil magma-poor hyper-extended margin to gain insight into the interplay between tectonics and sedimentation during the progression of rifting. In order to constrain this evolution, the DZ U-Pb signatures of the pre-rift source terranes were first characterized and then applied to the DZ U-Pb analyses of the syn- and post-rift strata to reconstruct the evolution of the Mauléon Basin as rifting progressed. Altogether this led to a model for sediment dispersal of a hyper-extended continental rifted margin.

New bedrock U-Pb age data from mid-lower crustal granulites from the Labourd massif in the western Pyrenees indicate the orthogneissic granulite plutons crystallized at 279.2±2.2 Ma and 274.1±1.8 Ma during late Variscan magmatism. Paragneissic granulites show zircon rim ages of ~295 Ma, which indicates widespread Variscan granulite-facies metamorphism of the Labourd massif. Core ages from these paragneissic granulites point to a Cambrian or Ordovician aged metasedimentary protolith which is in agreement with Boissonnas et al. (1974). DZ U-Pb signatures of the western Pyrenees pre-rift Paleozoic and Mesozoic strata indicate a Gondwanan signature, typical for Paleozoic strata from Iberia, and were likely sourced from the East Africa Orogen, northern Egypt and the Sinai Peninsula of Gondwana (Fernández-Suárez et al., 2002b;

Bea et al., 2010; Fernández-Suárez et al., 2013). The western Pyrenees Paleozoic and Mesozoic pre-rift strata all exhibit common age peaks of ~615 Ma, ~780 Ma, and ~1000 Ma, suggesting either continual recycling and/or supply of a monotonous and well mixed Gondwanan source throughout the Paleozoic and early Mesozoic. Ordovician, Carboniferous and Permian strata also contain major diagnostic DZ U-Pb age populations that differentiate their unit signatures at ~300 Ma in the Carboniferous and Permian strata and ~480 Ma in the Ordovician and Carboniferous strata, which are interpreted to be related to Variscan and Cadomian magmatism, respectively (Innocent et al., 1994; Schaltegger et al., 1996; Deloule et al., 2002; Lago et al., 2004; Cocherie et al., 2005; Castiñeiras et al., 2008; Denele et al., 2009; Filleaudeau et al., 2012; Denele et al., 2014; Pereira et al., 2014).

DZ U-Pb analyses have confirmed a diachronous multi-basin rifting evolution of the Mauléon-Arzacq rift system in the western Pyrenees, which has been used to create a model for sediment dispersal at hyper-extended continental margins. DZ provenance analysis of syn- and post-rift sediments from the Mauléon Basin indicates that during the early stages of diffuse extension, there is little to no change in provenance. But an abrupt change occurs once crustal necking begins, as the proximal and distal parts of the margin are isolated from hinterland sedimentary supply and locally sourced. During the late syn- to post-rift the proximal margin has an increase in hinterland sedimentary supply and as the sub-basins fill-and-spill they become reintegrated and the hinterland sediments reach the distal hyper-thinned domain. At this point, sedimentation returns to a regionally sourced hinterland drainage systems until it the region becomes influenced by subsequent events. Additionally, tracking the presence of ~300 Ma populations spatially and temporally across the basin in syn- and post-rift strata showed that the mid-lower crustal granulites were exhumed to the surface during the Albian to Cenomanian. This is a key

constraint in defining the activity along the NMD, as the detachment must have been active and hyperthinned domain must have been formed prior to these granulites being exhumed to the surface.

This study has shown robustness of applying the detrital zircon U-Pb technique to a magma-poor continental rifted margin to addressing tectonic, sedimentary and structural questions. Although the spatial-temporal variations occurring during rifting can be complex; with high density strategic sampling, that is spatially and temporally extensive, basin evolution can be understood and put into the larger framework of increasing the understanding of sedimentary processes during the evolution of rifting.

Figure 2-1: Map of the Mauléon Basin

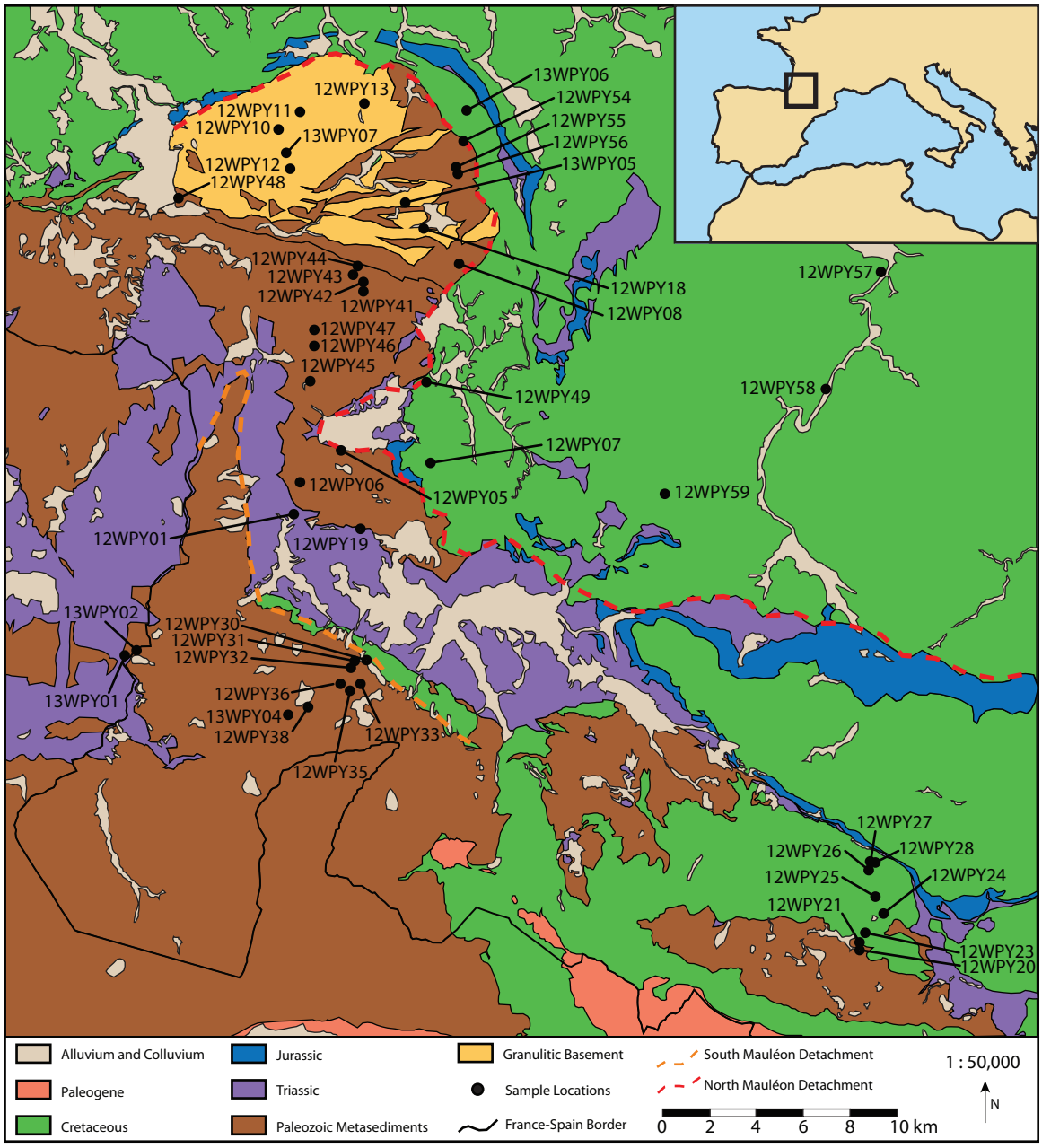


Figure 2-1: Map of the Mauléon Basin

Geologic map of the Mauléon Basin in the western Pyrenees created from BRGM map sheets (1/50,000) of Iholdy, St. Jean Pied de Port, Tardets-Sorholus, Espelette, Hasparren, Larrau and observations described in Masini et al. (2014). Zircon U-Pb sample locations superimposed. Inset: Regional map of Europe showing the location of the study area within the black box.

Figure 2-2: Simplified stratigraphic column of the western Pyrenees

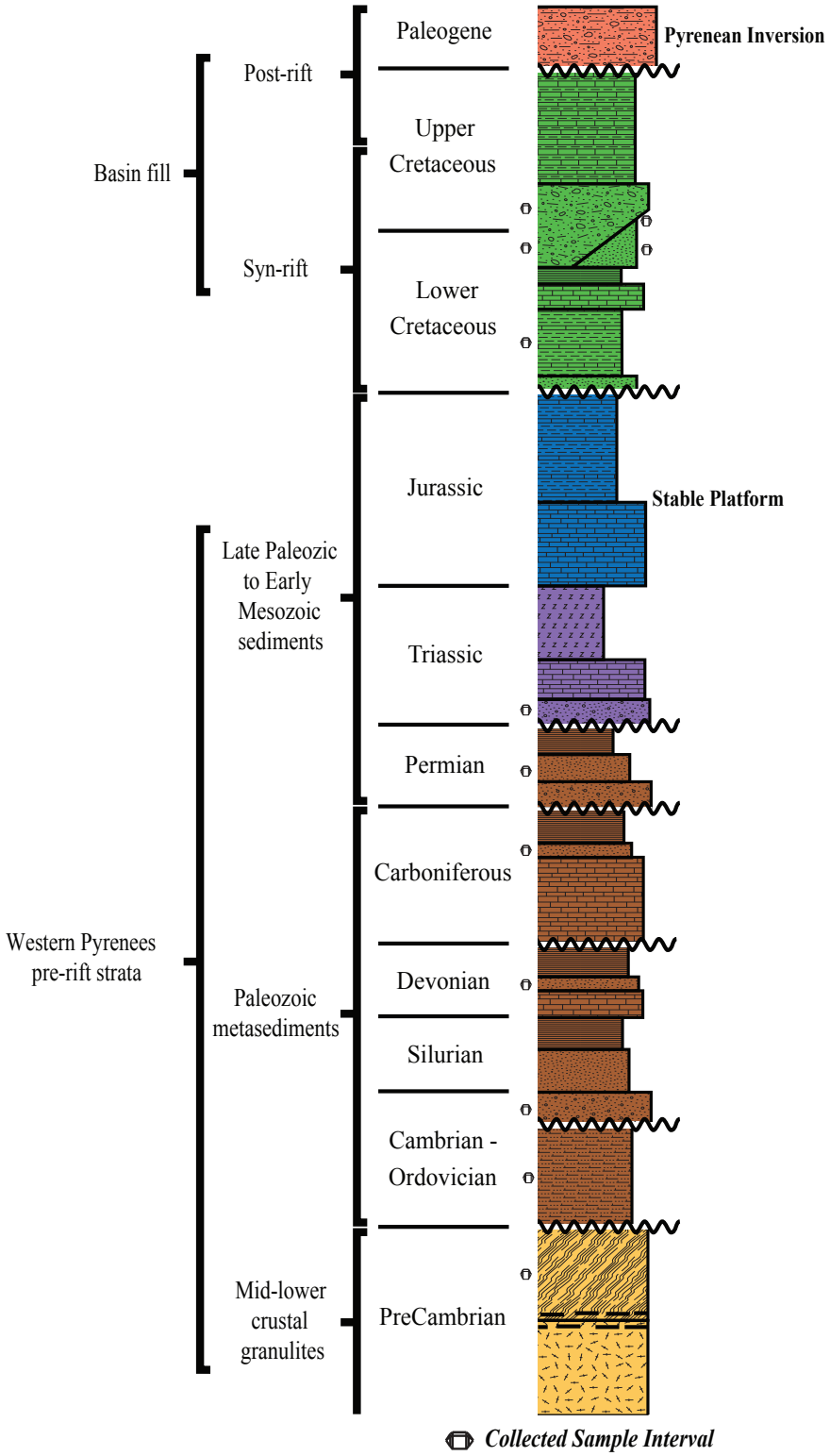


Figure 2-2: Simplified stratigraphic column of the western Pyrenees

Stratigraphic column of the western Pyrenees indicating sampled intervals, modified after Masini et al. (2014).

Figure 2-3: Bedrock and pre-rift zircon U-Pb data

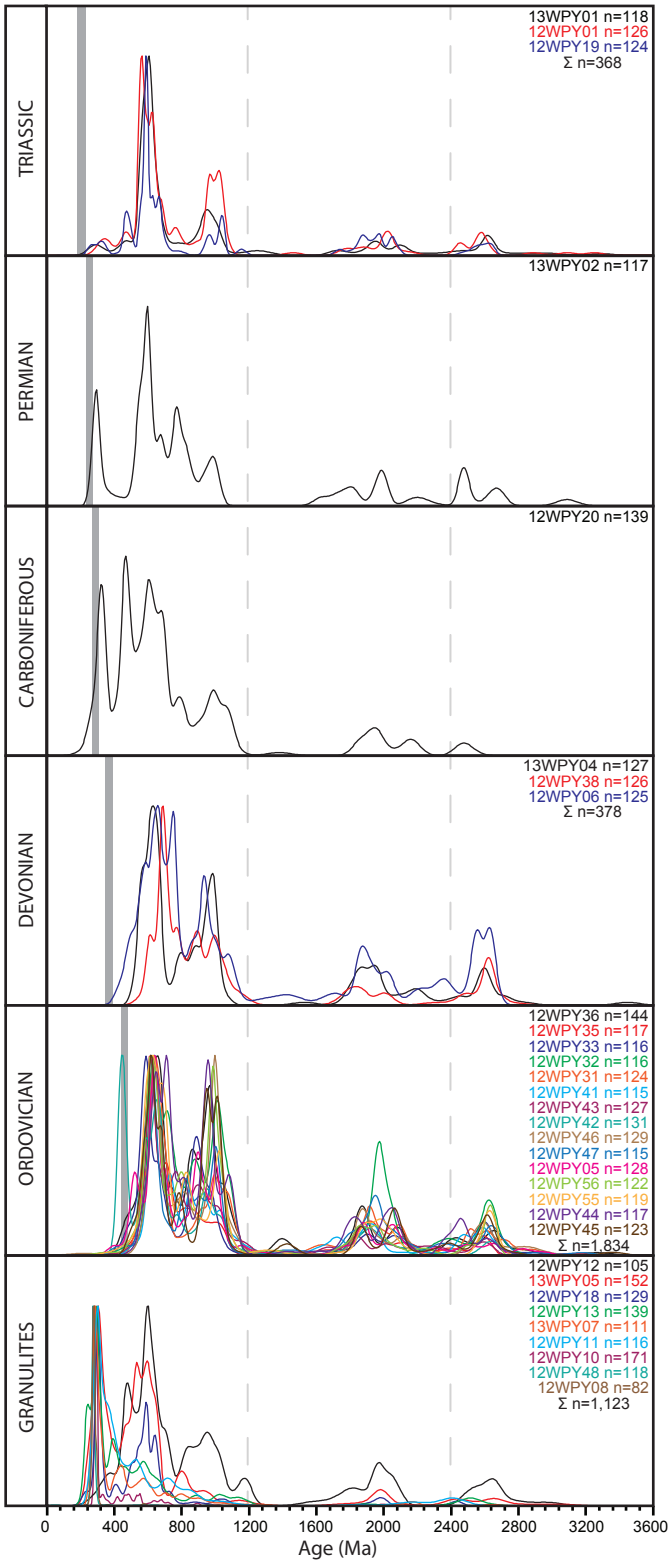
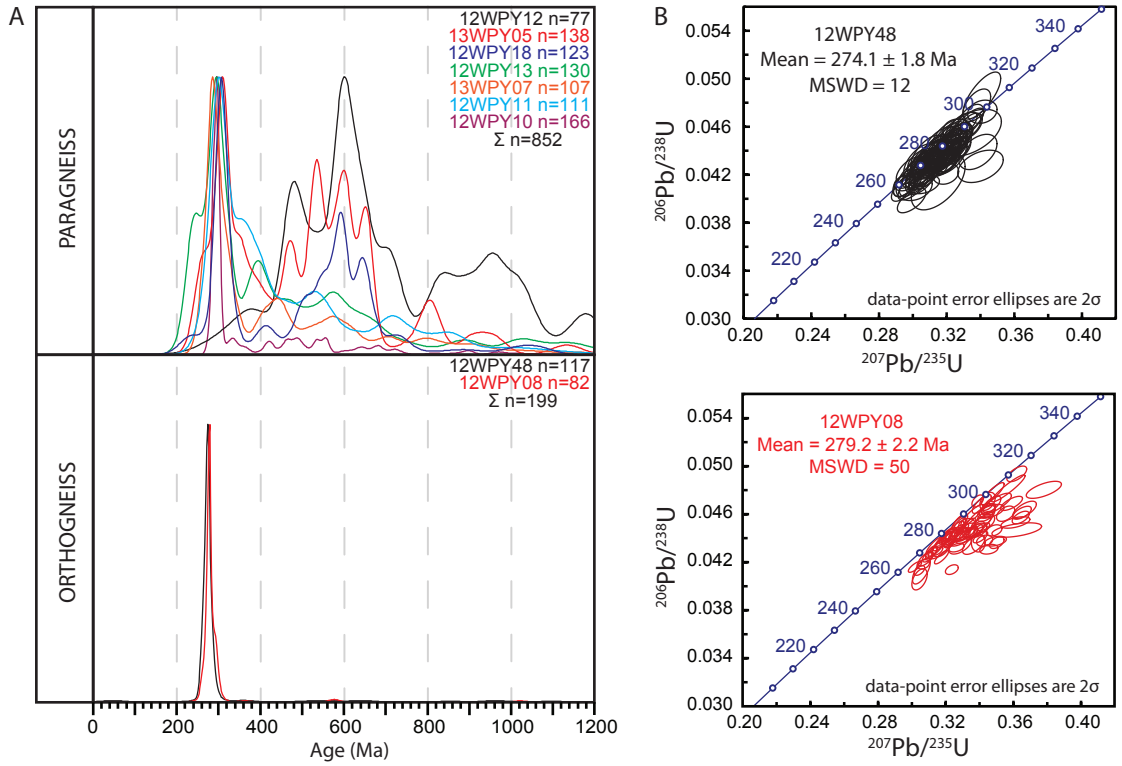


Figure 2-3: Bedrock and pre-rift zircon U-Pb data

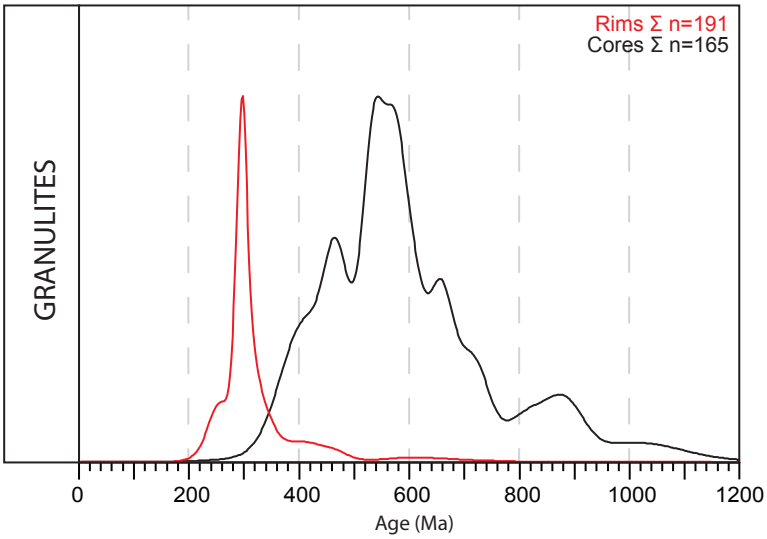
KDE plots for each of the western Pyrenees pre-rift samples analyzed, data shown from 0 - 3,600 Ma. Different colors of the curves represent different samples analyzed. Vertical gray bars indicate depositional age as defined by BRGM geologic maps. Each unit shows the sum of grains analyzed from each stratigraphic interval.

Figure 2-4: Paragneiss and orthogneiss zircon U-Pb data



4A. KDE plots for each of the lower crustal granulite samples analyzed, data shown from 0 - 1,200 Ma. Each sample is separated into one of two groups: orthogneiss or paragneiss. Each group shows the sum of grains analyzed from each group. 4B. Concordia plots of the U-Pb analyses for the two orthogneissic granulites.

Figure 2-5: Core and rim zircon U-Pb data



KDE plots separating cores and rims of paragneissic granulite samples, data shown from 0 - 1,200 Ma.

Figure 2-6: Bedrock and pre-rift zircon U-Pb signatures

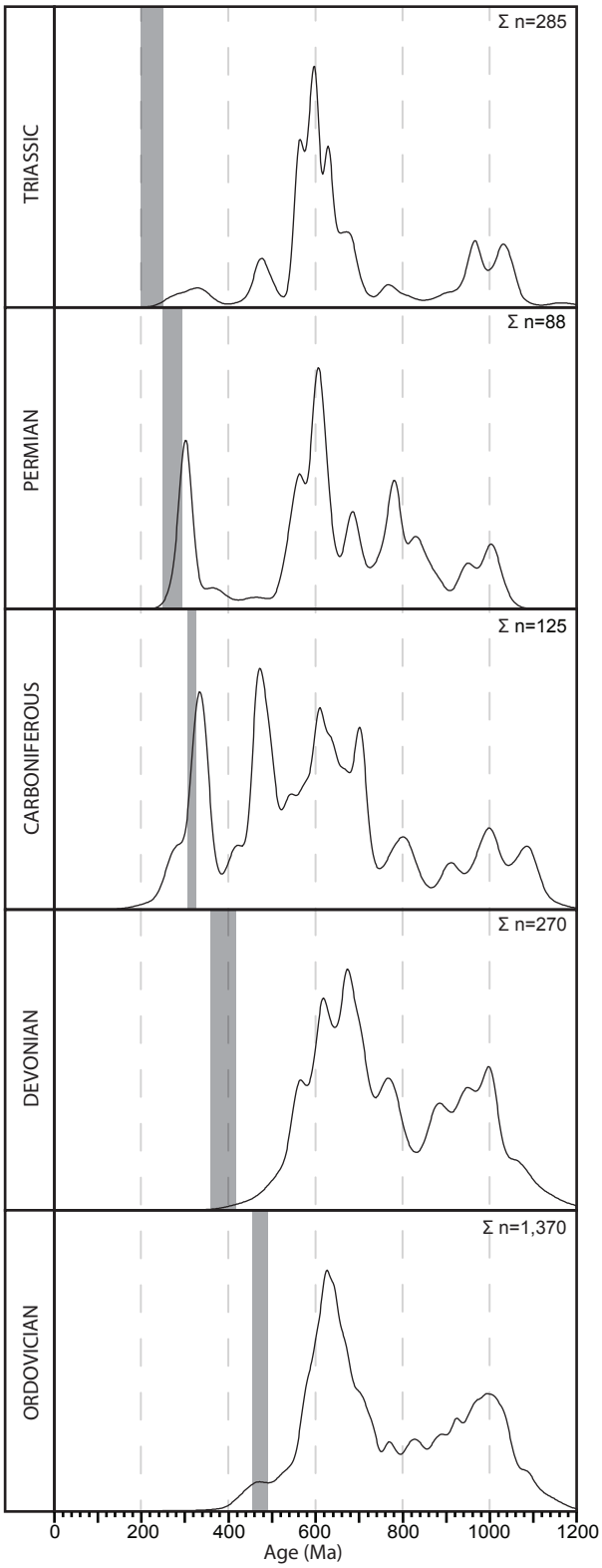


Figure 2-6: Bedrock and pre-rift zircon U-Pb signatures

KDE plots for each of the western Pyrenees pre-rift units analyzed, data shown from 0 - 1,200 Ma. Individual samples from each unit are combined to show a single unit signature. Vertical gray bars indicate depositional age as defined by BRGM geologic maps. Each unit shows the sum of grains analyzed from each stratigraphic interval.

Figure 2-7: Detrital zircon U-Pb data

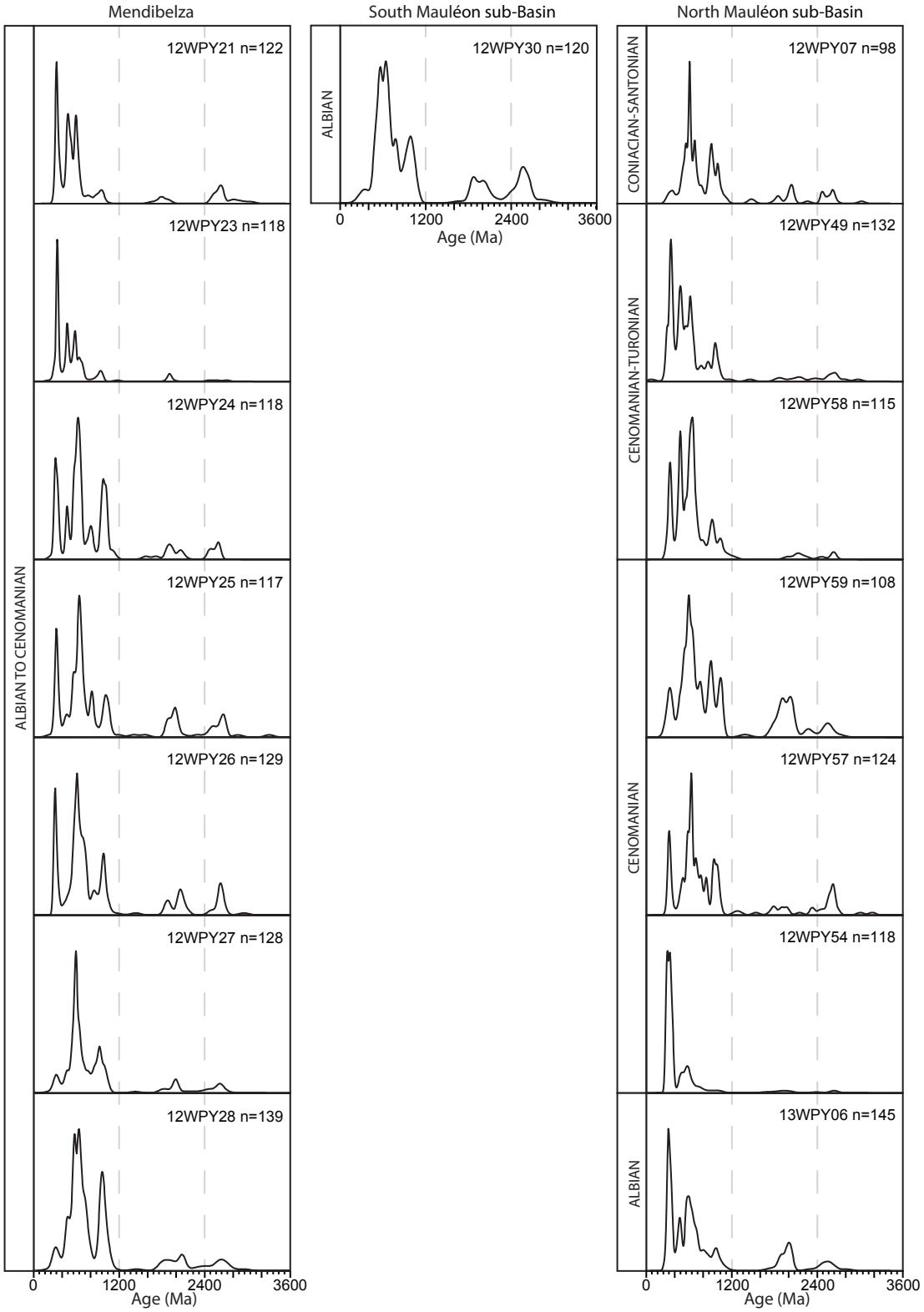


Figure 2-7: Detrital zircon U-Pb data

KDE plots for each of the detrital samples analyzed, data shown from 0 - 3,600 Ma. Each curve represents one sample and the number of grains analyzed from each sample are noted. Curves are separated into three groups based on locations: Mendibelza, South Mauléon sub-Basin and North Mauléon sub-Basin.

Figure 2-8: Proximal to distal detrital zircon U-Pb data

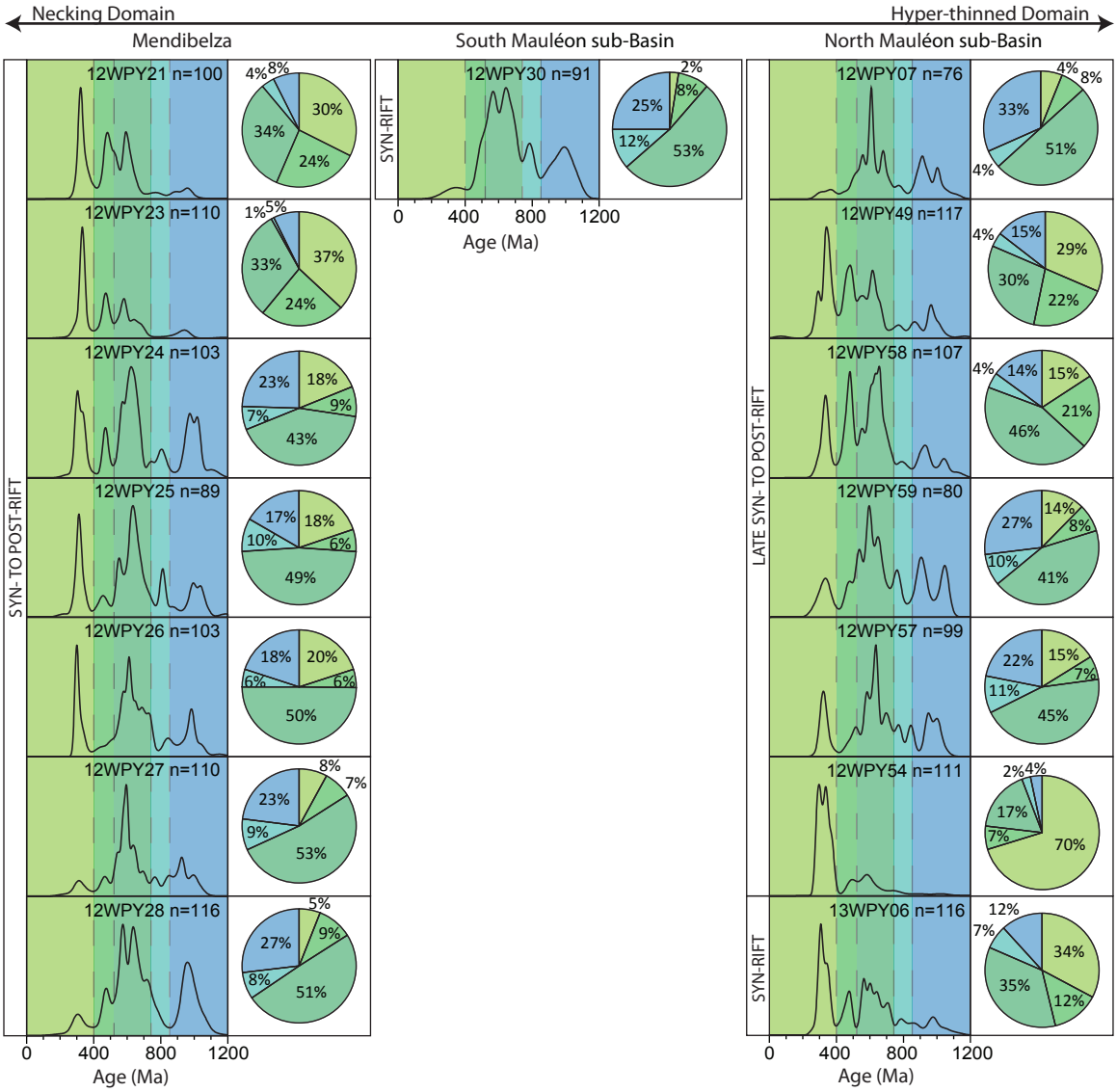
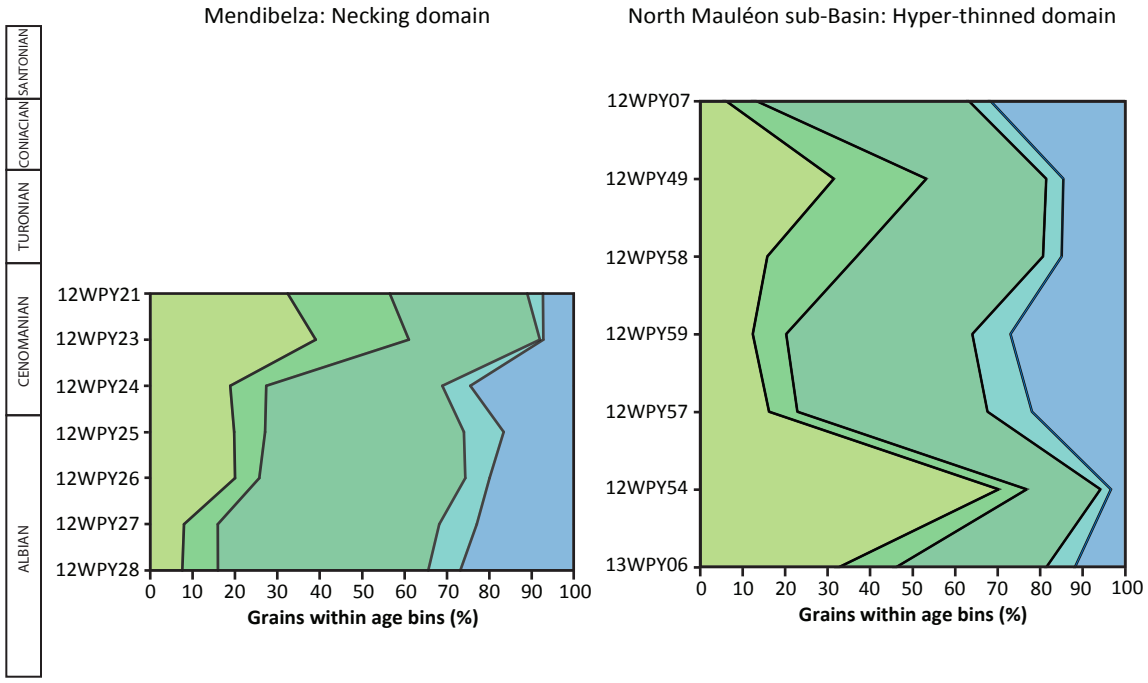


Figure 2-8: Proximal to distal detrital zircon U-Pb data

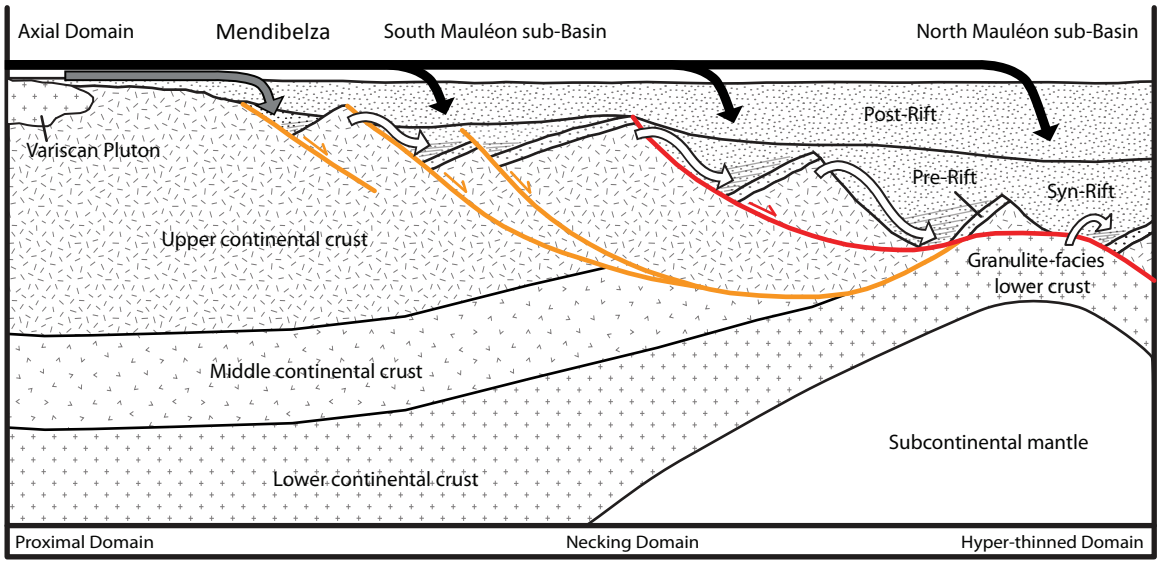
Interpretation of KDE plots for each of the detrital samples analyzed, data shown from 0 - 1,200 Ma. The three locations: Mendibelza, South Mauléon sub-Basin and North Mauléon sub-Basin represent the proximal necking domain to distal hyper-thinned domain, respectively. Each curve represents one sample and the grains are separated into five age bins based on main age peaks. The percent of grains in each bin are then shown in the pie chart to the right of each curve.

Figure 2-9: U-Pb Detrital zircon spatial and temporal variations



The percentage of the grains in each age bin shown in figure 2-7 are plotted on the x-axis. The y-axis is showing samples progressively up-section. Each sample is arranged to display up-section variations for the syn- and post-rift deposits to compare temporal and spatial variation of the Mendibelza samples and the North Mauléon sub-Basin samples.

Figure 2-10: Hyper-extended margin sediment dispersal model



The sediment model based on the Mauléon Basin as determined based on zircon U-Pb analyses. White arrows indicate locally sourced syn-rift deposits. The gray arrow indicated late syn-rift to post-rift regionally derived deposits. The black arrow represents regionally derived units deposited diachronous across the basin.

Chapter 3: Thermal evolution of a hyper-extended rift margin from bedrock and detrital zircon (U-Th)/He, Mauléon Basin, Western Pyrenees

INTRODUCTION

While the understanding of the structural, temporal, and thermal evolution of continental rifts and rifted continental margins has significantly evolved over the past several decades, fundamental aspects related to the thermal evolution of lithospheric stretching and breakup, in particular in the absence of voluminous magmatism, remains poorly understood. A pivotal point in the development of concepts and models for magma-poor margin evolution was the discovery of serpentinized exhumed mantle along the Galicia margin (Boillot et al., 1980; Boillot et al., 1987; Murillas et al., 1990; Manatschal, 2004; Ercilla et al., 2008). Building on earlier work (e.g., Sengör and Burke, 1978), these observations led to the differentiation between magma-rich and magma-poor (or volcanic and non-volcanic) rifted margins. Magma-rich, volcanic margins are often characterized by seaward-dipping reflectors and a symmetric, narrow ocean-continent transition zone due to simultaneous lithospheric and crustal separation in light of magmatic intrusions caused by decompression melting and possibly asthenospheric mantle plume magmas (Mutter, 1985; Minshull et al., 2001; Ebinger and Casey, 2001; Franke, 2013). In contrast, many workers (e.g., Whitmarsh et al., 2001) describe magma-poor margins as strongly asymmetric with a lower and upper plate margin and wide continent-ocean transition zones (e.g., Angola or Iberia). At these margins, continental break-up was a multistage process with crustal separation occurring prior to lithospheric mantle separation accompanied by little to no magmatic activity, implying that rifting and break-up are primarily controlled by mechanical rather than magmatic processes (Reston, 2009; Franke, 2013).

In terms of mechanical rifting, these processes have traditionally fall into pure-shear and simple-shear end member models. In the widely applied pure-shear rifting model, rift basins are formed by uniform, pure-shear, lithospheric thinning which leads to symmetric conjugate rift margins (McKenzie, 1978). This model relates both tectonic and thermal subsidence to the amount of crustal stretching and lithospheric thinning, with tectonic fault-accommodated subsidence collocated with the region of maximum thermal subsidence. In contrast, the simple-shear model differs from pure-shear model in several fundamental aspects, such as structural style of normal faults and lateral offset of crustal extension and lithospheric mantle thinning (Wernicke, 1981; Wernicke, 1985). This model implies that upper-crustal strain and lithospheric thinning, and therefore tectonic and thermal subsidence, are not collocated, resulting in highly asymmetric final rift geometries and the formation of upper and lower plate conjugate margins. Simple shear models were inspired by high-magnitude extensional systems such as the Basin and Range and the attempt to honor the observed upper- and lower-plate asymmetries (Coney and Reynolds, 1977; Davis and Coney, 1979; Crittenden et al., 1980; Lister et al., 1986, 1991).

Stemming from the original pure and simple-shear models, more recent academic and industry observations of modern rifted continental margins (e.g., Iberia-Newfoundland or NW Australian margins), exhumed fossil continental rifted margins (e.g., eastern Alps or Corsica), DSP/IODP borehole observations, and GXT reflection seismic surveys, have provided transformative insights and led to the development of a suite of holistic and process-oriented models for magma-poor rift margins and their evolution from continental breakup to margin development and eventual sea-floor spreading (Froitzheim and Eberli, 1990; Florineth and Froitzheim, 1994; Manatschal and Nievergelt, 1997; Driscoll and Karner, 1998; Whitmarsh et al., 2001; Pérez-Gussinyé and

Reston, 2001; Huismans and Beaumont, 2002; Contrucci et al., 2004; Moulin et al., 2005; Lavier and Manatschal, 2006; Manatschal et al., 2007; Osmundsen and Ebbing, 2008; Aslanian et al., 2009; Péron-Pinvidic and Manatschal, 2009; Unternehr et al., 2010; Péron-Pinvidic and Manatschal, 2010; Perez-Gussinye, 2012; Beltrando et al., 2013; Peron-Pinvidic et al., 2013; Sutra et al., 2013; Tugend et al., 2014). These novel geological and numerical models have focused on the processes accommodating crustal and lithospheric break-up as well as the structural evolution during progressive strain localization from diffusive rifting, crustal necking, hyper-extension, mantle exhumation, and eventual lithospheric separation to sea floor spreading. Even though these models have drastically improved the conceptual understanding of magma-poor rifted margins, critical outstanding questions remain, especially concerning the thermal evolution during progressive rifting and hyper-extension of the margin.

While the thermal state of the lithosphere prior to rifting and during seafloor spreading is informed on a fundamental level by constant-property models, the thermal evolution during high magnitude extension, hyper-extension and mantle exhumation is not well constrained (McKenzie, 1967; Sclater and Francheteau, 1970; Davis and Lister, 1974; Parsons and Sclater, 1977; Heestand and Crough, 1981; Furlong and Chapman, 1987; Stein and Stein, 1992; Carlson and Johnson, 1994; Hillier and Watts, 2005; Hasterok, 2013). For examples, while the McKenzie (1978) pure-shear model for low magnitude extension relates crustal extension, subsidence, and heat flow in a predictive fashion that tends to yield excellent results for relatively low-β factor (low extension relative to thinning) rifts such as in the Red Sea/Gulf of Suez or the North Sea (Wernicke, 1985; Buck et al., 1988; White, 1989; Glennie, 1998; Khalil and McClay, 2001; Bosworth et al., 2005), it becomes increasingly questionable whether the McKenzie (1978) pure-shear model adequately predicts the thermal regime of high-β factor rifting

during extreme crustal extension and depth-dependent lithospheric thinning (Royden and Keen, 1980; Huismans and Beaumont, 2011). The applicability of this or other models to hyper-extended margins is difficult to evaluate as detailed studies are hampered by the general inaccessibility of hyper-extended margins due to either their submarine locations (Iberian-Newfoundland margin) or post-rifting burial by thick passive margin sediments (Gulf of Mexico). This has limited studies to reflection and refraction seismic surveys and/or sparse boreholes that generally do not penetrate the pre-rift bedrock or syn-rift sedimentary sections within the necking domain or the distal rifted margin. Exhumed fossil margins can expose bedrock geometries of rifted and hyper-extended margins in spectacular fashion as preserved in the eastern Alps (Err-Ela or Tasna), but they tend to be variably tectonized with overprinted thermal histories (Hurford et al., 1989; Froitzheim and Eberli, 1990; Florineth and Froitzheim, 1994; Froitzheim and Rubatto, 1998; Masini et al., 2012).

In order to constrain the progressive proximal to distal thermal evolution of a magma-poor continental rifted margin, a systematic high-resolution bedrock and detrital zircon (U-Th)/He thermochronometric study was applied to the Mauléon Basin of the western Pyrenees of France. The Mauléon Basin formed during Early Cretaceous hyper-extension of Iberian lithosphere as a result of lateral propagation of rifting in the Bay of Biscay (Lagabrielle and Bodinier, 2008; Jammes et al., 2009; Masini et al., 2014). The limited magnitude of shortening during post-rift Pyrenean inversion and subsequent erosional denudation has resulted in the preservation and exposure of outcrops of sedimentary cover, upper and lower crustal sections, serpentinized lithospheric mantle, and the basic rift-relationships (Jammes et al., 2009; Masini et al., 2014; Tugend et al., 2014). These properties make the Mauléon Basin an ideal locality for the application of low temperature thermochronometric techniques to constrain rift-related processes during

hyper-extension. Here we focus on refining thermal constraints in the hyper-thinned and necking domains, timing of exhumation along one of the major extensional structures, the South Mauléon Detachment, and the thermal evolution of basin deposits during the progression of rifting. By bringing these constraints to the Cretaceous rifting processes, the Mauléon Basin findings can be related back to alternative models for rifting, thereby providing a greater insight to the spatial-temporal complexities that occur during the evolution of magma-poor, hyper-extended rifted margins.

GEOLOGIC BACKGROUND

The Mauléon Basin

Continental extension, break-up, and seafloor spreading in the Bay of Biscay was accompanied by a propagating rift that caused hyper-extension of the crust in southwestern France and northern Spain prior to Pyrenean shortening in the region (Lagabrielle and Bodinier, 2008; Jammes et al., 2009; Masini et al., 2014). Masini et al. (2014) divided this rift system from north to south into four domains: the Arzacq Basin, the Grand Rieu high, the Mauléon Basin and the Axial domain or Pyrenean hinterland. The Mauléon Basin, which is bound by the Grand Rieu high to the north and by the Axial domain to the south, formed during Cretaceous hyper-extension (Jammes et al., 2009).

The Mauléon Basin sediments were deposited on western Pyrenean pre-rift strata which include mid-lower crustal granulites, Paleozoic metasediments, and late Paleozoic to early Mesozoic sediments (Figure 3-1). The mid-lower crustal granulites are composed of two units: the lower unit is a metabasic granulite and the upper unit is a quartzo-feldspathic metasedimentary granulite with a Cambrian to Ordovician aged protolith (Boissonnas et al., 1974; Vielzeuf, 1984). Stratigraphically above the granulites are

Paleozoic sedimentary strata that underwent low-grade anchizonal to lower greenschist facies metamorphism while the mid-lower crustal units experienced granulite-facies metamorphism, both during the Variscan Orogeny (Heddebaut, 1973). These deformed and metamorphosed strata are overlain by post-Variscan undeformed late Paleozic to early Mesozoic sediments including Permian conglomerates, sandstone, silts and pelites, and Triassic deposits of Buntsandstein, consisting of shales, sandstones and conglomerates (Curnelle, 1983; Fréchengues, 1993; Masini et al., 2014). Late Triassic transgressions deposited Muschelkalk platform carbonates, which were capped by Keuper evaporates and a second carbonate platform. These deposits are cut by a major erosional unconformity due to a late Jurassic regression (Curnelle, 1983; Fréchengues, 1993; Masini et al., 2014). The final pre-rift deposits are Barremian to lower Aptian carbonates and marls (Masini et al., 2014).

The interpretation of the syn- to post-rift evolution of the Mauléon Basin has been largely constrained by field observations aided by boreholes that penetrate the Cretaceous sediments in many localities and the Paleozoic strata in others (e.g., Brunet, 1984; Souquet et al., 1985; Biteau et al., 2006; Masini et al., 2014, BRGM website). The Mauléon Basin sedimentation began with deposition of upper Aptian syn-rift carbonates and marls during crustal extension initiated in the Late Aptian. The opening of the South Mauléon sub-Basin was accommodated by the South Mauléon Detachment (SMD) which exhumed upper crustal material as shown in Figure 3-1 (Masini et al., 2014). In the Albian to Cenomanian a delta developed from the Axial domain at the southern extent of the South Mauléon Basin, which provided sediments for the first megasequence that deposited Mendibelza conglomerates and siliciclastic turbidites in the South Mauléon sub-Basin (Boirie and Souquet, 1982; Souquet et al., 1985; Masini et al., 2014). According to the current model, the locus of high-magnitude extension migrated

basinward with the initiation of the North Mauléon Detachment (NMD) in the middle Albian (Figure 3-1), thereby forming the North Mauléon sub-Basin (Masini et al., 2014). The NMD is thought to have exhumed the already thinned middle to lower crust and mantle while the second megasequence was diachronously deposited in the North and South Mauléon sub-Basins (Boirie and Souquet, 1982; Souquet et al., 1985; Jammes et al., 2009; Masini et al., 2014). Due to a lack of exposure, Masini et al. (2014) notes that it is difficult to determine the exact time of cessation of NMD activity but is has been interpreted to have ceased by late Cenomanian times since post-rift deposition consisted of Cenomanian siliciclastic sedimentation and carbonate deposition over the Axial domain (Masini et al., 2014).

Pyrenean Inversion

Pyrenean orogenesis was the result of convergence between Iberia and Europe that began at about 83 Ma and continued from chron 34 to 31, there was then a hiatus of about 10-15 m.y., until convergence resumed during the Eocene, between chrons 24 to 21 (Rosenbaum et al., 2002). A total of about 75-80 km of shortening occurred in the west-central Pyrenees between the Late Cretaceous and early Miocene at an average rate of 1.2 mm/yr (Teixell, 1998). Balanced cross sections and surface structure restorations show that the amount of shortening decreases from east to west (Seguret and Daignieres, 1986; Teixell, 1998). Biteau et al. (2006) suggest that the majority of the shortening was accommodated during the Lutetian, 47.8 Ma to 41.2 Ma. In the Western Pyrenees, this caused the Mauléon Basin to be partially inverted as a tectonic pop-up block. Shortening was accommodated along the North Pyrenean Frontal thrust system to the north of the Mauléon Basin and the Igountze-Mendibelza or Lakora thrust to the south as the basin was thrust northward over the former Grand Rieu high and Arzacq domains and

southward onto the Axial domain (Casteras, 1969; Teixell, 1990; Muñoz, 1992; Daignières et al., 1994; Teixell, 1998). Masini et al. (2014) notes that within the Mauléon Basin these thrust systems cut through the basement and east of the basin the thrusts cut through the sedimentary cover. They interpret that this may cause more of the deformation to be accommodated at a deeper crustal level in the Mauléon Basin allowing for greater preservation of pre-, syn- and post-rift structures as compared to the central and eastern Pyrenees.

Thermal history constraints

There are several time-temperature constraints for the thermal history of the mid-lower crustal granulites and syn- to post-rift units, which give insight into the thermal evolution of Mauléon Basin during progressive rifting. The mid-lower crustal bedrock units underwent granulite-facies metamorphism during the Variscan Orogeny at ~300 Ma (Chapter 2) and biotite $^{40}Ar/^{39}Ar$ ages placed these granulites at ~300°C or a mid-crustal depth of ~10 km during the late Triassic to early Jurassic (Masini et al., 2014). The granulites were exhumed to the surface during the Albian to Cenomanian, as shown by detrital zircon U-Pb data from the distal syn-rift section (Chapter 2). Broadly speaking, the exhumation of mid-lower crustal granulites in the Albian to Cenomanian in the Mauléon Basin suggests that the NMD was active by this time (Chapter 2).

Vacherat et al. (2014) reported low-temperature thermochronometric data from Mauléon Basin syn- to post-rift turbidities (n=5), a granitic intrusion, and a gneiss. Using zircon (U-Th)/He, zircon fission-track analysis, borehole data, and thermal modeling, they determined that with only about 2 km of overburden, Albian to Cenomanian sediments reached temperatures of 180°C, producing a geothermal gradient of 80°C/km during Cretaceous rifting. This heat pulse kept the basin at high temperatures from 80 Ma

until rapid cooling beginning at 50 Ma. Other evidence of a 110 Ma to 85 Ma heating episode, as summarized in Vacherat et al. (2014), comes from raman spectroscopy of carbonaceous material, talc-chlorite mineralization from hydrothermal fluid circulation, alkaline magmatism, gabbroic dike biotite $^{40}Ar/^{39}Ar$ ages, and textural relationships from high-temperature low-pressure metamorphism (Montigny et al., 1986; Golberg and Leyreloup, 1990; Boulvais et al., 2006; Jammes et al., 2009; Clerc and Lagabrielle, 2014; Masini et al., 2014).

ZIRCON (U-TH)/HE SAMPLING STRATEGY AND METHODOLOGY

This study presents a high sampling density and structurally integrated (U-Th)/He data set from both pre-rift strata and syn- to post-rift strata from the proximal to distal Mauléon Basin. Samples were collected within a structural context in the footwall of detachment faults and in vertical transects within the different structural domains to provide more robust insights into spatial-temporal and thermal variations. Vertical transects were sampled in the necking domain of the Mendibelza and South Mauléon sub-Basin and the hyper-thinned domain of the North Mauléon sub-Basin to characterize the variations in thermal evolution from proximal to distal portions of the Mauléon Basin during progressive rifting (Masini et al., 2014; Tugend et al., 2014).

Zircon (U-Th)/He thermochronometry (ZHe) has been shown to be a powerful tool in elucidating exhumation histories in a variety of tectonic environments (Stockli, 2005; Reiners, 2005; Biswas et al., 2007; Wolfe and Stockli, 2010). This technique is based on the radioactive decay of ^{238}U, ^{235}U, and ^{232}Th that produce ^{4}He or alpha particles which travel ~16.6μm, ~19.6μm, and ~19.3μm, respectively, before stopping in zircon (Farley et al., 1996). Since ^{4}He can be produced and ejected from the outer ~20μm of the

grain, each single grain ZHe age requires a morphometric correction (F_T correction) based on mineral density and crystal geometry (Farley et al., 1996). He diffusion kinetics in zircon are characterized by a bulk closure temperature (Tc) of ~180°C and a partial retention zone (ZHe PRZ) between ~200-140°C (Reiners et al., 2004; Reiners, 2005; Stockli, 2005; Wolfe and Stockli, 2010). He diffusion in zircon is also influenced by grain size (ESR), effective uranium (eU) as a proxy for radiation damage, and parent nuclide zoning (Reiners et al., 2004; Hourigan et al., 2005; Dobson et al., 2008; Wolfe and Stockli, 2010; Guenthner et al., 2013)

For this study, zircon was isolated from samples by conventional mineral separation, including crushing, grinding, water table concentration, heavy-liquid density, and magnetic susceptibility separation techniques. For each sample, a total of three to five grains were handpicked from each U-Pb age population, previously defined by zircon U-Pb analysis (see Chapter 2). The U-Pb dating technique involved LA-ICP-MS analysis of whole grains mounted on double-sided tape, to preserve complete and unpolished zircons before ZHe dating. This U-Pb depth profiling technique also quantifies zircon overgrowth and uranium and thorium zonation with depth, allowing for either a modified ejection correction (F_T correction) or for screening and exclusion of strongly zoned grains.

Zircons were picked that were ideally euhedral with a width >70 μm. In cases where grains were <70 μm or rounded, the most euhedral and largest grains available were selected. The zircons were measured, packed in acid-cleaned platinum tubes, and each single grain aliquot was diode laser heated for 10 minutes at ~1300°C to extract ^{4}He. All aliquots were reheated for 10 minutes at ~1300°C until ^{4}He yield dropped to <1%. Subsequent to degassing, zircons were unpacked from platinum foil, and dissolved to determine the concentrations of parent U, Th, and, Sm by ID-ICP-MS analysis using an

isotopically-enriched U and Th tracer. Dissolution was accomplished by standard U-Pb double pressure-vessel digestion procedures using hydrofluoric acid, nitric acid and hydrochloric acid for a total of 4 days. Spiked solutions were analyzed for U, Th and Sm concentrations using a Thermo Element2 ICP-MS. Reported ages are alpha ejection corrected (F_T) using Helios software and errors (~8%, 2σ) are standard errors based on the reproducibility of the Fish Canyon Tuff standard (Reiners et al., 2002). Mineral separation and (U-Th)/He analyses were completed at the UTChron facilities at the Jackson School of Geosciences at the University of Texas at Austin.

The collected vertical transect data were modeled for possible thermal history and geothermal gradients using the inverse modeling function of (U-Th)/He modeling software package (HeMP) (Hager and Stockli, 2009). This inverse modeling code generates forward-modeled ages based on randomly generated time-temperature (t-T) paths and user-defined variables such as sample elevation, independently defined t-T constraints, and kinetic and geometric factors, such as grain size and He diffusion kinetics (Hager and Stockli, 2009; Lee et al., 2011). For each t-T path, the forward modeled ZHe age, calculated using a Crank-Nicolson approach, is evaluated against the ZHe sample ages in terms of goodness of fit criteria (Ketcham, 2005). In addition to possible age fits, the code also evaluates possible geothermal gradient fits in the context of the vertical age distribution and thus can give important constraints and insights into the possible geothermal gradients that are consistent with the data (Hager and Stockli, 2009). For the Mauléon Basin specific modeling, user-defined thermal history constraints were limited to depositional age of the sampled units and temporal constraints on rifting and Pyrenean inversion to more efficiently generate t-T paths that were realistic and consistent with known geologic constraints.

ZHe Results from the proximal to distal Mauléon Basin

Zircon was separated from a total of 33 granulitic and metasedimentary pre-rift and sedimentary syn- to post-rift samples, from six vertical transects spanning from the proximal necking domain to the distal hyper-thinned domain of the Mauléon Basin (Figure 3-1). All data are shown in Figures 3-2 to 3-7 and in Appendix B. These results are presented from the proximal to distal margin positions.

The Mendibelza transect covers the hanging wall of the breakaway of the SMD in the proximal necking domain of the South Mauléon sub-Basin. A total of six samples were collected from the Albian to Cenomanian strata along a transect ranging from ~900 m to ~1360 m, that stratigraphically transitions from Albian Spicula Marls (n=1) to Albian to Cenomanian conglomerates (n=4) and sandstone (n=1) up-section (Figure 3-2). All of the ZHe ages obtained show a range from 27.9 Ma to 132.8 Ma (Figure 3-2), with 92% of the ages younger than the respective depositional age indicating substantial partial to total thermal resetting after deposition. From ~900 m to ~1360 m, the ages for each sample cluster at ~32 Ma (n=21), ~50 Ma (n=9), ~47 Ma (n=21), ~60 Ma (n=9), ~55 Ma (n=8), and ~76 Ma (n=9). This age range between samples can likely be attributed to a ZHe PRZ with a potential inflection point occurring between 12WPY21 and 12WPY23 (Figure 3-2). There is a weak negative correlation between age and grain size. The average grain size is smaller in samples 12WPY24 and 12WPY28 (Figure 3-2), which could partially indicate why younger ages are observed in these samples.

The Mt. Monoa transect covers the hanging wall of SMD and characterizes the distal necking domain of the South Mauléon sub-Basin. A total of eight samples were collected from footwall Paleozoic metasediments (n=7) and hanging wall Albian sediments (n=1) along a transect ranging from ~370 m to ~940 m (Figure 3-3). The footwall ZHe ages show a range from 56.2 Ma to 227.8 Ma (Figure 3-3), with all of the

ages younger than the respective depositional age indicating partial or total resetting post-deposition. From ~370 m to ~940 m, the ages for each sample cluster at ~95 Ma (n=15), ~87 Ma (n=16), ~95 Ma (n=17), ~94 Ma (n=13), ~80 Ma (n=17), ~138 Ma (n=15), and ~177 Ma (n=20), this age spread between samples can likely be attributed to a ZHe PRZ with an inflection point occurring between 12WPY36 and 12WPY38 at ~900 m (Figure 3-3). While these samples are at the same modern elevation, their paleo-depth difference was ~0.8 km given dip of the strata. There is also a correlation between age and grain size, e.g. in samples 12WPY36 and 12WPY38 (Figure 3-3). Both samples are at an elevation ~900 m, but 12WPY36 records a younger age range of ~64 Ma - ~127 Ma and a smaller equivalent spherical radius (ESR) ranging from ~30 μm to ~39 μm, while 12WPY38 records an older age range of ~94 Ma - ~176 Ma and a larger equivalent spherical radius (ESR) ranging from ~39 μm to ~62 μm. Therefore, the combination of small grain size and a deeper paleo-depth likely indicate why younger ages are obtained from 12WPY36 (Figure 3-3). This transect also has one hanging wall syn-rift sample, 12WPY30 (n=22), that shows detrital ZHe ages that range from 49.2 Ma to 192.7 Ma (Figure 3-3), with 14% of the ages younger than the depositional age, indicating possible minimal resetting post-deposition.

The Mt. Jara transect is situated in the breakaway of the NMD and characterizes the proximal hyper-thinned domain. A total of three samples were collected from Triassic sandstone (n=1) and Paleozoic metasediments (n=2) along a transect ranging from ~110 m to ~800 m (Figure 3-4). These ZHe ages show an age range from 39.8 Ma to 102.5 Ma (Figure 3-4), with all of ages younger than the respective depositional age, indicative of partial or total resetting post-deposition. From ~110 m to ~800 m, the ages for each sample cluster at ~80 Ma (n=4), ~78 Ma (n=4), and ~160 Ma (n=17), this age spread can likely represent a ZHe PRZ with a potential inflection point between 12WPY05 and

12WPY06 (Figure 3-4). The Paleozoic ZHe ages display a negative correlation with eU and the Triassic grains initially display a positive correlation up to ~200 ppm where they show an abrupt negative correlation (Figure 3-4). A slight positive correlation exists between age and grain size; noticeably observed in 12WPY05, with smaller grains recording younger ages and larger recording older ages (Figure 3-4).

The Mt. Baygoura transect characterizes the hyper-thinned domain. Four samples were collected from Paleozoic metasediments along a transect ranging from ~100 m to ~880 m with all of the ZHe ages showing a range from 39.8 Ma to 96.5 Ma (Figure 3-5). All of the ages are younger than the respective depositional age, implying partial or total resetting post-deposition. From ~100 m to ~880 m, the ages for each sample cluster at ~56 Ma (n=13), ~50 Ma (n=11), ~50 Ma (n=5), and ~60 Ma (n=4) (Figure 3-5).

The Labourd massif samples can be separated into eastern and western transects and characterize the more distal hyper-thinned domain. A total of 10 samples were collected from mid-lower crustal granulites. The western transect ranges from ~70 m to ~670 m and the ZHe ages show a range from 38.2 Ma to 64.2 Ma (Figure 3-6). All of the ages are younger than the respective depositional age, indicative of partial or total post-depositional resetting. From ~70 m to ~670 m, the ages for each sample cluster at ~50 Ma (n=4), ~50 Ma (n=4), ~60 Ma (n=5), ~58 Ma (n=5), ~52 Ma (n=6), and ~48 Ma (n=7) (Figure 3-6). The eastern transect ranges from ~150 m to ~470 m and all of the ZHe ages show an age range from 37.4 Ma to 91.4 Ma (Figure 3-6). All of the ages are younger than the respective depositional age, indicating partial or total resetting post-deposition. From ~150 m to ~470 m, the ages for each sample cluster at ~43 Ma (n=5), ~53 Ma (n=6), and ~70 Ma (n=14) (Figure 3-6). The increase of age with elevation is

likely attributable to the presence of a ZHe PRZ and a potential inflection point occurring between 12WPY18 and 12WPY55 (Figure 3-6).

In addition to the six vertical transects, two samples were collected from Albian and Cenomanian strata from the North Mauléon sub-Basin to characterize the post-rift thermal history of the more distal hyper-thinned domain. The ZHe ages obtained show a range from 35.5 Ma to 82.0 Ma (Figure 3-7). All of the ages are younger than the respective depositional age, indicating total or partial resetting post-deposition (Figure 3-7). For samples at ~180 m and ~200 m the ages for each sample cluster at ~51 Ma (n=4) and ~48 Ma (n=15) (Figure 3-7).

DISCUSSION AND THERMOCHRONOMETRIC MODELING

The ZHe thermochronometric data from the Mauléon Basin reveals two distinct age domains: (1) an elevation-invariant age cluster at ~50 Ma throughout large portions of the Mauléon Basin and (2) an elevation-invariant age cluster ~98 Ma with a pronounced inversion point in the South Mauléon sub-Basin (Mt. Monoa and Mt. Jara) and an exhumed ZHe PRZ with ages ranging up to ~228 Ma. These data clearly indicate rapid cooling at ~98 Ma and ~50 Ma, with the ~98 Ma elevation-invariant ages being interpreted as signaling rapid middle Cretaceous rift-related cooling, that appears to postdate the reported onset of rifting in the Aptian (Masini et al., 2014). The cooling recorded at ~50 Ma is interpreted to record rapid and large-scale exhumation in response to Pyrenean inversion and more specifically to the onset of inversion and activity of the Lakora thrust in the early Eocene (Ypresian) (Teixell, 1990, 1998; Rosenbaum et al., 2002; Biteau et al., 2006; Vacherat et al., 2014). Based on this observed dichotomy in

ZHe data, the six transects are discussed as two groups that preserve the pre- to syn-rift thermal signature and only the post-rift to syn-inversion thermal signature, respectively.

Pre- to Syn-rift Thermal Evolution

The high-resolution and systematic structural integration of ZHe thermochronometric data in the Mauléon Basin has resulted in the critical discovery and documentation of syn-rift ZHe ages and an exhumed pre-rift ZHe PRZ from the late Paleozoic to early Mesozoic strata of the Mt. Monoa and Mt. Jara transects in the necking and proximal hyper-thinned domain in the South Mauléon Basin (Figure 3-8). The footwall of Mt. Monoa shows the most complete record of pre- to syn-rift ages (Figure 3-8, transect 2). Paleozoic samples below ~900 m retain elevation-invariant ages in response to rapid rift exhumation from temperatures >180°C during rifting. At ~900 m an inflection point between recorded ages of ~98 Ma and > ~98 Ma is observed and interpreted to be the base of the pre-rift ZHe PRZ (pre-rift ~180°C paleo-isotherm) (Figure 3-9). The ZHe ages from Mt. Monoa show no effects of post-rift burial or reheating to temperatures >140°C. Similarly a Cretaceous detrital syn-rift hanging wall sample shows only minimal post-deposition thermal resetting and preserves the local detrital provenance of detritus derived from the Mt. Monoa footwall (Figure 3-8, transect 2). This indicates that after Cretaceous rifting and prior to rapid cooling during Pyrenean inversion this sample was located above or down-temperature of the ~180°C paleo-isotherm (Figure 3-9).

ZHe data from Mt. Jara, the hanging wall of the SMD, and the footwall of the NMD, also preserves pre-rifting ages but the record is less complete than at Mt. Monoa (Figure 3-8, transect 3). With the exceptions of a few young ZHe ages with radiation damage reduced He retention (Figure 3-4, high eU), the Triassic sample from the top of

Mt. Jara shows ZHe ages similar to structurally shallow samples from Mt. Monoa (>900 m). This corroborates that that footwall and hanging wall Triassic samples both resided in the pre-rift ZHe PRZ and places the pre-rift ~180°C paleo-isotherm below these samples (Figure 3-9). The Paleozoic samples from Mt. Jara, in contrast, exhibit ages (~78 Ma and ~80 Ma) that fall between the rapid cooling events (~98 Ma and ~50 Ma) and indicate post-rift partial resetting and prolonged residence in the post-rift ZHe PRZ (Figures 3-8, transect 3). This places the post-rift ~180°C paleo-isotherm below these partially-reset samples (Figures 3-9).

The data from these two transects allow for estimates of the location of the pre- and post-rift ZHe PRZ in the transition zone from the distal necking to proximal hyper-thinned domain through time (Figure 3-9). Based on ZHe ages from both transects, the base of the pre-rift ZHe PRZ was located near the top of the Ordovician strata and the top reaching upward at least into Triassic strata (Figure 3-9). While pre- and syn-rift ZHe ages are preserved in the footwall of the SMD at Mt. Monoa, structurally lower and more distal samples exposed at Mt. Jara were overprinted by the post-rift ZHe PRZ due to post-rift burial and heating.

Inverse modeling was employed using a co-inversion approach of the Mt. Monoa and Mt. Jara pre- to syn-rift ZHe ages to quantitatively reconstruct the pre- to syn-rift time-temperature (t-T) history (Figure 3-10A and 3-11). The Mt. Monoa and Mt. Jara inversions suggest t-T paths where temperatures increased significantly between ~110 Ma to ~80 Ma reaching a maximum temperature of ~190°C followed by rapid cooling (Figure 3-10A and 3-11). This appears to be consistent with an early syn-rift heat pulse followed by cooling and exhumation during rifting. Modeling results place major exhumation along the SMD in the late Albian to Cenomanian. Co-inversion of the vertical transect data also sheds light on likely geothermal gradients and suggests a best-

fit early syn-rift gradient of ~80°C/km for the distal necking to proximal hyperthinned domains (Figure 3-10B). This estimate is consistent with geothermal gradient estimates by Vacherat et al. (2014). Numerical inversion of ZHe data from Mt. Jara does not allow for reconstruction of the Albian to Cenomanian syn-rift thermal history due to post-rift thermal overprinting, but clearly demonstrates that samples < ~300 m remained at moderately high temperatures >180°C until the onset of Pyrenean inversion (Figure 3-11).

In addition to vertical transect inverse modeling, a single sample with significant ZHe age variations as a function of eU (Figure 3-4, 12WPY19) was modeled using the radiation damage He diffusion kinetics model (Guenthner et al., 2013). No fits were found due to either drastic parent nuclide zonation or underestimation of damage-enhanced He loss at high radiation doses in the radiation damage kinetic model, as fits to the data would require significant reductions in He retentivity at high radiation damage.

Pyrenean Inversion Thermal Evolution

All other vertical transects in the necking and hyper-thinned domains of the North and South Mauléon sub-Basins show ZHe ages that document major post-rift resetting and erasure of any pre- or syn-rift thermochronometric signal due to reheating and burial. In contrast to the Monoa transect, the Mendibelza transect is more proximal but farther to the east in the South Mauléon sub-Basin necking domain and shows pervasive late Cretaceous and earliest Tertiary thermal overprinting (Figure 3-12, transect 1). The stratigraphically and structurally highest sample from Mendibelza record older ZHe ages (~76 Ma) and are interpreted to be a part of the post-rift ZHe PRZ, placing the ~180°C paleo-isotherm (base of the post-rift ZHe PRZ) at about ~1300 m elevation (Figure 3-12, transect 1). Except for this partially reset sample from the upper-most Mendibelza

sandstone, all samples record ages of ~50 Ma (Figure 3-12, transect 1), suggestive of re-exhumation of these strata in the hanging wall of the Lakora thrust from temperatures >180°C at ~50 Ma (Teixell, 1998). The increasing thermal overprinting along strike from Mt. Monoa to Mendibelza is likely best explained by the increasing magnitude in Pyrenean inversion and shortening from west to east (Seguret and Daignieres, 1986; Teixell, 1998).

The hyper-thinned domain of the North Mauléon sub-Basin also shows pervasive thermal overprinting and erasure of the Cretaceous and older thermal history due to reheating and burial and re-exhumation during Pyrenean shortening. Elevation-invariant ZHe ages from Paleozoic samples from the Mt. Baygoura transect record rapid cooling at ~50 Ma, indicative of cooling/exhumation from >180°C in the North Mauléon sub-Basin (Figure 3-12, transect 4). Similarly, ZHe ages from the exhumed granulitic samples in the Labourd massif show that the distal parts of the hyper-thinned domain also experienced post-rift temperatures >180°C. This is in agreement with data published by Vacherat et al. (2014). However, the data indicates slight difference between the two flanks of the Labourd massif. Samples from the western massif exclusively exhibit ~50 Ma ZHe ages, consistent with rapid basin-wide exhumation from >180°C during Pyrenean inversion (Figure 3-12, transect 5). In the eastern massif, however, the highest samples exhibited partially reset ~70 Ma ZHe ages in addition to the ~50 Ma ZHe ages, indicating the presence of the post-rift ZHe PRZ and lateral variations in thermal history in the Labourd massif due to either lower-magnitude basin burial or heating during the Late Cretaceous (Figure 3-12, transect 6). Similar to the basement samples, distal Cretaceous syn- and post-rift strata are also all thermally reset and record ZHe ages of ~50 Ma, indicating maximum burial temperatures >180°C in the North Mauléon sub-Basin prior to Pyrenean shortening-related exhumation at ~50 Ma. Based on the thermal constraints developed at

each of these transects, it is possible to reconstruct the post-rifting ~180°C paleo-isotherm across the basin (Figure 3-12, cross-section).

Thermochronometric inverse modeling was completed using the ZHe data from the Mendibelza transect to address the time-temperature history and rift margin evolution through Pyrenean inversion. The modeling results show rapid heating during rifting followed by prolonged residence at temperatures >180°C until ~50 Ma (Figure 3-13). While it is not possible to evaluate maximum heating temperatures, the basin has to remain at temperatures between ~180°C and ~200°C from rifting until the onset of rapid cooling at ~50 Ma (Figure 3-13). No thermochronometric modeling was undertaken for vertical transect that displayed only elevation-invariant ZHe ages as they simply record very rapid cooling and exhumation during Pyrenean shorting at ~50 Ma.

Temporal progression of deformation in the Mauléon Basin

New ZHe data from across the proximal necking to the distal hyper-thinned domains of Mauléon Basin constrain the temporal and thermal evolution of crustal necking, hyper-extension, basin burial and heating, as well as Pyrenean shortening and exhumation. Geological constraints place the onset of rifting in the Mauléon Basin in the late Aptian (Jammes et al., 2009; Masini et al., 2014), field relationships in the South Mauléon sub-Basin bracket the earliest syn-rift sediments as predating the deposition of siliciclastic Mendibelza deposits and postdating deposition of the Spicula Marls, implying that the onset of extension occurred in the Late Aptian. In contrast, ZHe ages and thermochronometric modeling results from Mt. Monoa indicate rapid large-magnitude exhumation along the SMD not until Albian to Cenomanian times, suggesting that late Aptian extension observed by Masini et al. (2014) is related to diffuse initial

normal faulting that occurs prior to strain localization and major extension along the SMD and the formation of the necking domain in the Albian to Cenomanian.

According to Masini et al. (2014), the locus of high-magnitude extension migrated basinward with the initiation of the NMD in the middle Albian, which formed the hyper-thinned domain. Based on detrital zircon U-Pb data (Chapter 2), the granulites of the Labourd massif were exhumed to the surface and provided detritus to early syn-rift deposits during the Albian to Cenomanian times, implying that the NMD was active and the hyper-thinned domain had to have been formed by the Albian to Cenomanian. Thermochronometric constraints, however, are not precise enough to differentiate between activity along the SMD and NMD during the Albian to Cenomanian (Figure 3-16). While the data could be consistent with both detachments being active coevally during the basinward migration of high-magnitude extension to the NMD and the formation of the hyper-thinned domain, crosscutting relationship indicate the NMD is younger and truncates the SMD. While enhanced precision in both Albian to Cenomanian chronostratigraphy and thermochronometric constraints on the exhumation along the SMD are needed to determine the exact timing and possible overlap in deformation, it does, however, indicate that the time frame between the development of the necking domain and hyper-thinned domain occurred rapidly in the Albian to Cenomanian.

Implications for the thermal evolution of the Mauléon Basin

During the early stages of rifting, pre- and syn-rift units were heated to >180°C prior to being exhumed. Structurally shallower and more proximal samples in the necking zone, Mt. Monoa and Mt. Jara, experienced less burial and heating during progressive rifting and preserve pre-rift and syn-rift related ZHe ages (Figure 3-8). Based on inverse modeling of these thermochronometric data, the geothermal gradients in the distal

necking to proximal hyper-thinned domains reached maximum values of ~80°C/km during the early stages of rifting (Figure 3-10B). This constraint corroborates the high-geothermal gradient estimates of Vacherat et al. (2014). In the more distal portion of the hyper-thinned domain all pre- and syn-rift ages were erased and samples were partially to totally reset during syn- and post-rift evolution of the Mauléon Basin due to burial temperatures in excess of ~180°C (Figure 3-12). These samples and transects, thus, do not provide any constraints on the timing and thermal evolution of the rifting process and only allow for the constraint of the minimum magnitude of basin heating and the timing of re-exhumation during Pyrenean shortening.

Complete resetting of ZHe ages in the distal hyper-thinned domain in combination with basin sediment thicknesses allows for an estimation of geothermal gradients across the basin - similar to the approach of Vacherat et al. (2014). Borehole data (BRGM on-line information) was used to estimate the minimum and maximum overburden across the basin to determine the mean thickness of syn-rift sedimentary cover (Vacherat et al., 2014; this study). For this study, three boreholes (AIE1, UM1 and SP1) in closest proximity to the sampling locations with post-rift reset ZHe ages were used to calculate minimum geothermal gradients as a function of the minimum burial temperature derived from ZHe data and the best estimate of pre-Pyrenean burial depth. The estimated thickness of sedimentary cover deposited over the Mt. Baygoura and the Labourd massif transects would be ~1,700 m and ~2,150 m, respectively (Figure 3-14). These estimates of sedimentary overburden correspond to minimum geothermal gradients of ~100°C/km and ~90°C/km, respectively, in the hyper-thinned domain (Figure 3-15). These geothermal gradient estimates seem realistic, as they are only slightly more elevated than estimates from the distal necking to proximal hyper-thinned domain. Importantly, if these high geothermal gradients are in fact conductive and driven by a

dramatic increase in basal heat flow, then the crust should be thinned to <8 km to keep the basement rocks below solidus temperatures, since no syn-rift partial melting is observed in the Labourd massif.

As Cretaceous rifting came to an end with the initial convergence of Iberia and Europe at ~83 Ma (Rosenbaum et al., 2002), these high geothermal gradients in the necking to hyper-thinned domains were likely not sustained and paleo-isotherms relaxed possibly in response to initial cooling related to Pyrenean inversion. This is illustrated by recorded ages between ~80 Ma and ~50 Ma in the eastern Labourd massif and Mendibelza, which are interpreted as the post-rift ZHe PRZ (Figure 3-12). This agrees with and explains the initial cooling based on zircon fission track and ZHe discussed in Vacherat et al. (2014). Whereas the western Labourd massif, Mt. Baygoura and North Mauléon sub-Basin sediments remained at temperatures >180°C until the onset of major Pyrenean shortening and thrust exhumation along the Lakora thrust at ~50 Ma (Figure 3-12 and 3-16), which is also shown by the thermochronometric inverse modeling from Mendibelza (Figure 3-13).

Implication for the understanding of magma-poor hyper-extended margins

These new thermochronometric data not only document the thermal evolution from rifting to hyper-extension to basin inversion, they also shed light on the syn-rift thermal evolution of magma-poor hyper-extended margins in general. The results indicate that only localities in the proximal rift margin from the distal necking domain to proximal hyper-thinned domain preserve rift-related timing, as the margin was heated to syn-rift temperatures >180°C with geothermal gradients of ~80°C/km prior to exhumation/cooling at ~98 Ma, and then remained at temperatures <140°C during post-rifting times. In contrast, the more distal hyper-thinned domain experienced syn-rift

heating to >180°C and geothermal gradients of ~80-100°C/km and stayed at temperatures >180°C until Pyrenean inversion. Such dramatic syn-rift heating is not observed in intra-continental rifts, such as the Gulf of Suez or the North Sea, and pure-shear rift models (e.g., McKenzie, 1978) predict the geothermal gradient only steepens proportionally with lithospheric thinning, the result being that syn-rift heat flow never significantly exceeds burial heating. Thus the syn-rift thermal evolution of the Mauléon Basin appears to be inconsistent with predictions of low-β pure-shear models and requires other mechanisms to heat these strata during lithospheric thinning.

More recent dynamic models by Huismans and Beaumont (2011) offer one possible solution via depth-dependent stretching, asthenospheric upwelling and underplating of magams. Through thermo-kinematic modeling, Vacherat et al. (2014) determined that heating the basin strata could be attained by crustal thinning until break-up followed by subcontinental lithospheric mantle thinning and exhumation. In effect, this model would predict dramatic basin-wide reheating due to major depth-dependent mantle thinning, which is consistent with the findings of this study (Royden and Keen, 1980; Kusznir and Karner, 2007; Huismans and Beaumont, 2011).

Though dynamic and kinematic models broadly predict asthenospheric upwelling, and melt infiltration of the mantle if not the lower crust is inferred along comparable ocean-continent transitions (Müntener et al., 2010), the importance of conductive heating vs heating by advective fluid flow remains poorly quantified and understood. Several studies show that the Cretaceous rift-related elevated syn-rift geothermal gradients cannot be explained by conductive heating alone but require advective heating due to fluid circulation to generate the observed thermal anomaly throughout the sedimentary strata (Dauteuil and Ricou, 1989; Clerc et al., 2015). For example, Clerc et al. (2015) invokes highly conductive Triassic evaporites below and thick, insulating Flysch above pre- and

syn-rift strata to create the perfect storm of thermal wicking and blanketing combined with increased basal heat flow and hot fluid advection. However, the thermochronometric data in this study, suggests that conductive heating accommodates a significant portion of the temperature increase as vertical transects in basement and basin fill do not show discernibly non-linear gradient profiles as would be expected if advective heat was important.

This new thermochronometric data indicates that the Mauléon Basin is still another example of syn-rift heating of hyper-extended margins, similar to others that have been recently described in Corsica and the southern Alps (Smye and Stockli, 2014; Malusà et al., 2015; Ewing et al., 2015; Beltrando et al., in review). Evidence of high temperatures in the distal rifted margin also has important ramifications in terms of the strength of the lithosphere during rifting, rheological models, and early syn-rift hydrocarbon maturation and migration. In addition, these observations are pertinent for the further development of rifting models as they indicate that the classic pure-shear model cannot adequately predict the thermal and therefore subsidence evolution of hyper-extended magma-poor continental rifted margins.

CONCLUSIONS

The Mauléon Basin has been shown to be an ideal locality to study the temporal and thermal evolution of a magma-poor hyper-extended rift system by coupling bedrock and detrital ZHe data from multiple vertical transects that characterize different structural rifting domains. The application of this strategy led to the discovery and characterization of syn-rift ZHe ages (~98 Ma) and the exhumed pre-rift ZHe PRZ in the South Mauléon sub-Basin, or distal necking to proximal hyperthinned domain. This new

thermochronometric data and inverse modeling shows that the margin was heated to syn-rift temperatures >180°C with geothermal gradients of ~80°C/km prior to rift-related exhumation/cooling of the proximal rift margin at ~98 Ma. Which indicates major exhumation along the SMD in the Albian to Cenomanian, inferring that late Aptian extension observed by Masini et al. (2014) is related to diffuse initial normal faulting prior to strain localization and major exhumation. Exhumation along the SMD is also consistent with estimates of the timing of activity along the NMD based on zircon U-Pb analyses of hyper-thinned domain syn-rift strata (Chapter 2). This implies that the time-frame between the development of the necking and hyper-thinned domains occurred rapidly as rifting progressed. The distal rift margin, or distal hyper-thinned domain, experienced syn-rift heating to >180°C and geothermal gradients of ~80-100°C/km and remained at temperatures >180°C until minimal localized exhumation related to the initial convergence of Iberia and Europe at ~83 Ma (Rosenbaum et al., 2002) and the onset of major Pyrenean shortening and thrust exhumation along the Lakora thrust at ~50 Ma (Teixell, 1990, 1998; Rosenbaum et al., 2002; Biteau et al., 2006; Vacherat et al., 2014).

The Mauléon Basin is therefore another example of syn-rift heating at a hyper-extended margin. Moreover, these data indicate syn-rift heating, potentially due to an elevated geothermal gradient imposed by mantle upwelling and deep melt infiltration, can be accounted for through depth-dependent stretching models (Royden and Keen, 1980; Kusznir and Karner, 2007; Müntener et al., 2010; Huismans and Beaumont, 2011). These observations of the thermal evolution of a hyper-extended margin are beneficial for the further development of rifting models as they indicate that the classic pure-shear model cannot adequately predict the thermal evolution of hyper-extended magma-poor continental rifted margins.

Figure 3-1: Map of the Mauléon Basin

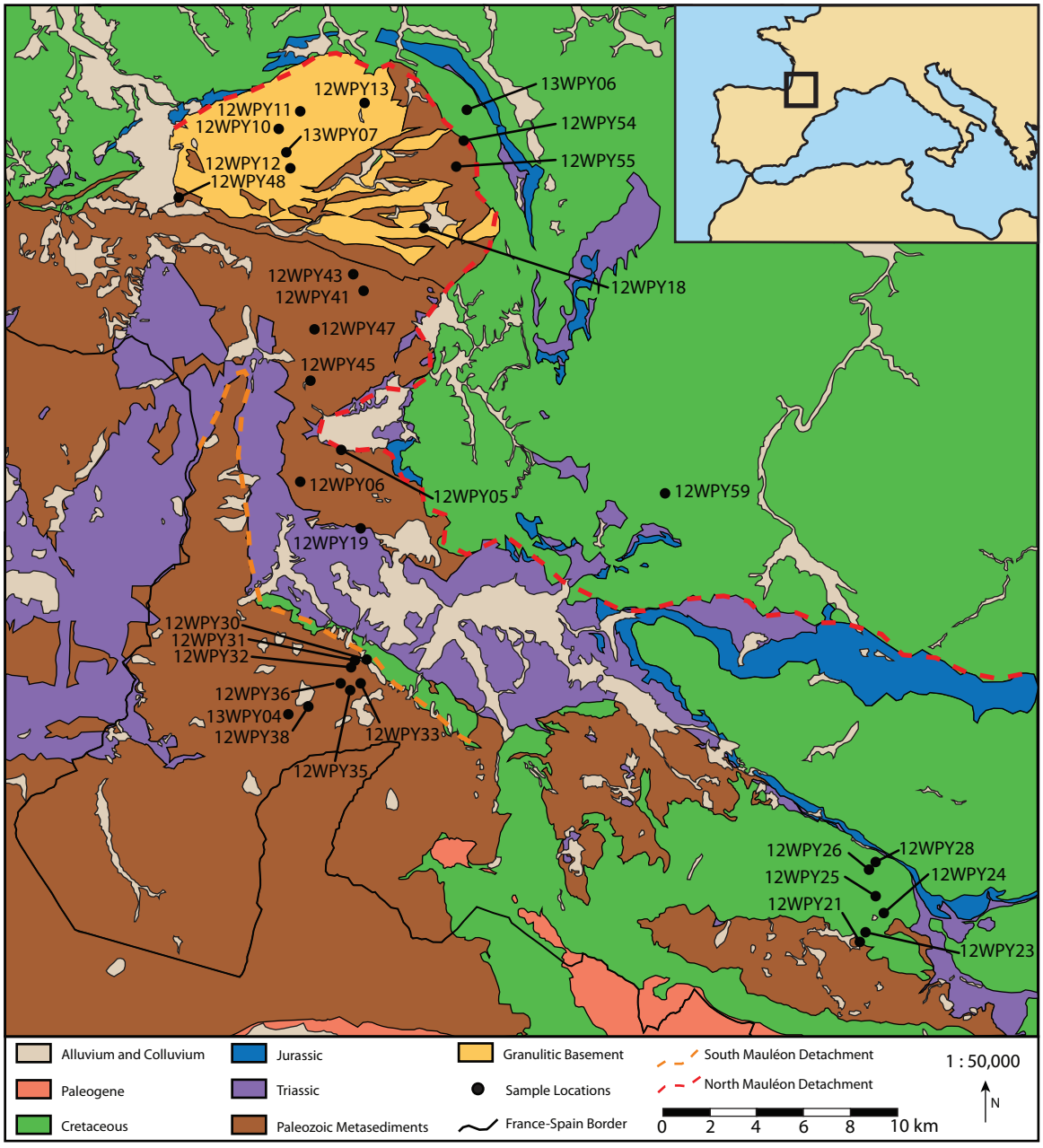


Figure 3-1: Map of the Mauléon Basin

Geologic map of the Mauléon Basin in the Western Pyrenees created from BRGM map sheets (1/50,000) of Iholdy, St. Jean Pied de Port, Tardets-Sorholus, Espelette, Hasparren, Larrau and observations described in Masini et al. (2014). Zircon (U-Th)/He sample locations superimposed. Inset: Regional map of Europe showing the location of the study area within the black box.

Figure 3-2: Mendibelza (U-Th)/He data

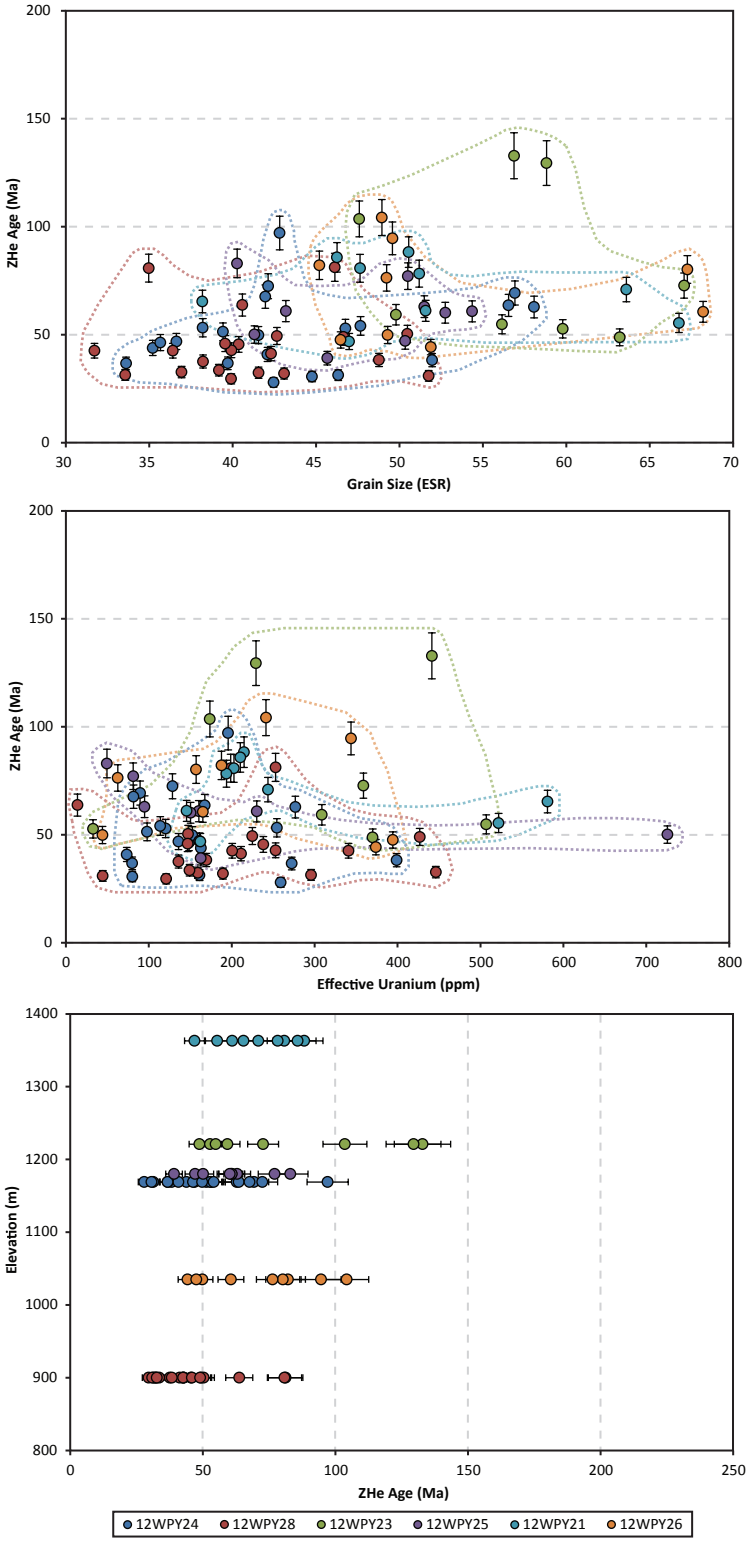


Figure 3-2: Mendibelza (U-Th)/He data

(U-Th)/He results from the Mendibelza transect. Each color represents one sample and the plots illustrate trends with grain size, eU, elevation, and ZHe ages. Trends for each sample are shown by colored dotted lines.

Figure 3-3: Mt. Monoa (U-Th)/He data

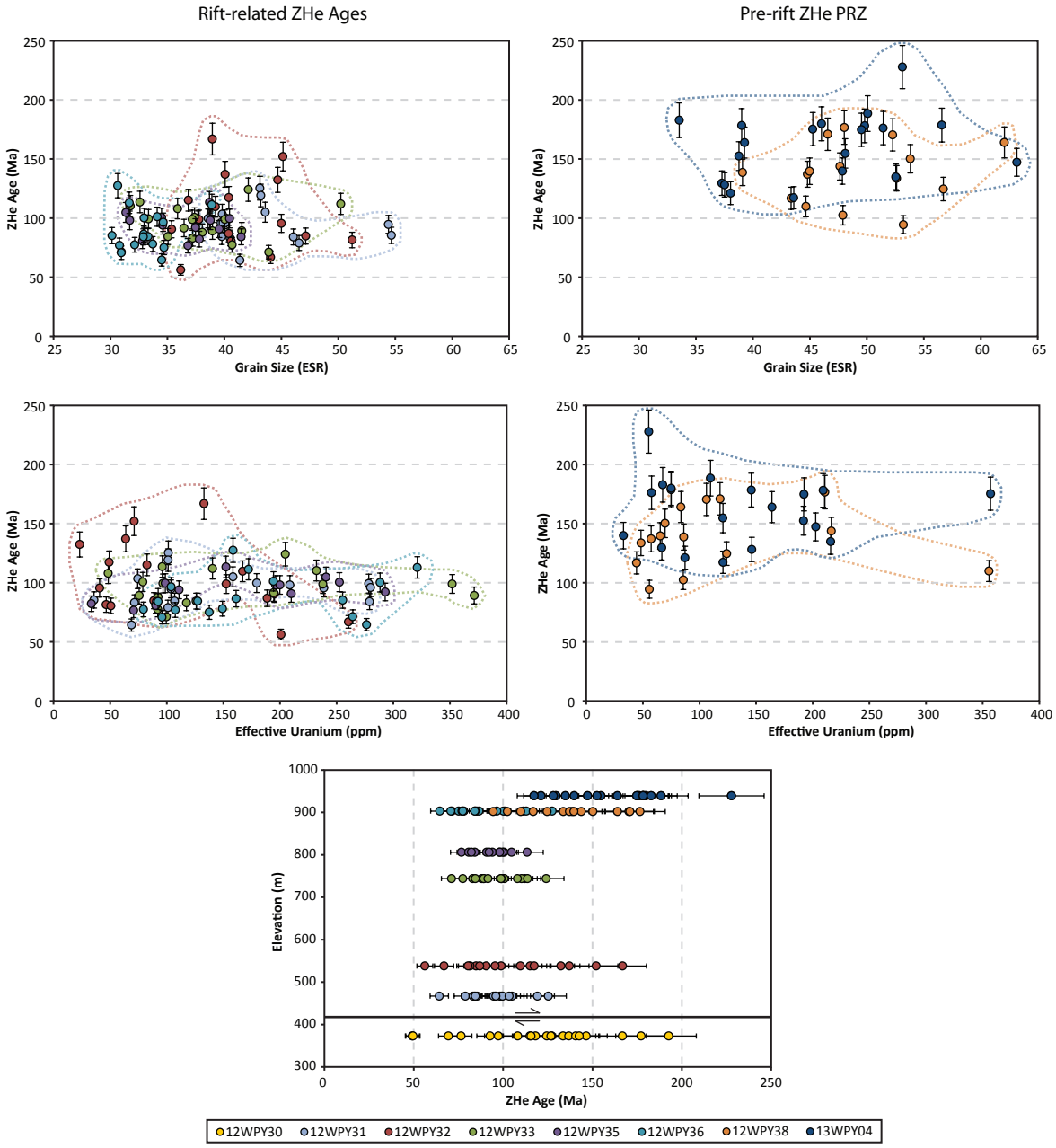


Figure 3-3: Mt. Monoa (U-Th)/He data

(U-Th)/He results from the Mt. Monoa transect. Each color represents one sample and the plots illustrate trends with grain size, eU, elevation, and ZHe ages. Trends for each sample are shown by colored dotted lines. Samples are separated based on the obtained ages.

Figure 3-4: Mt. Jara (U-Th)/He data

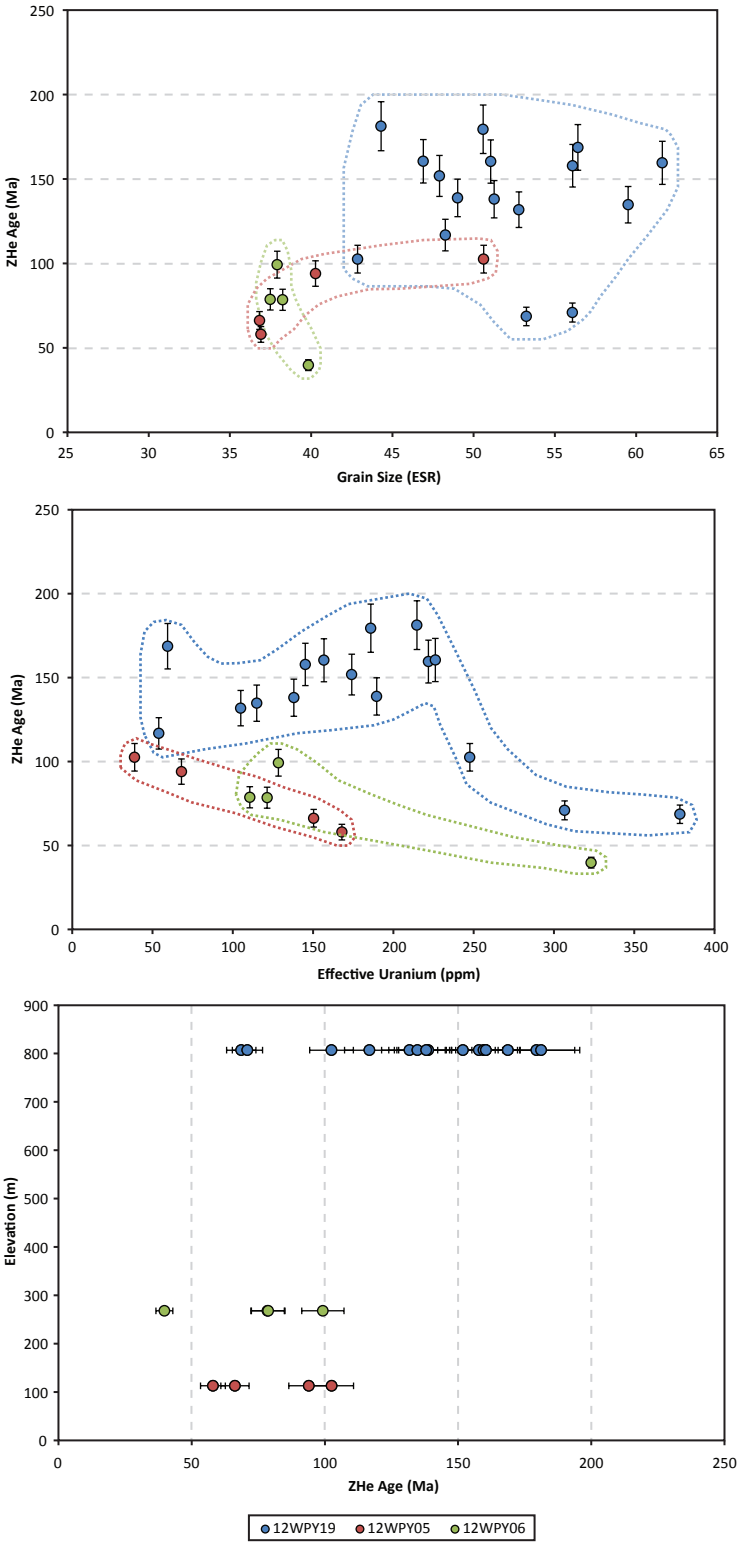


Figure 3-4: Mt. Jara (U-Th)/He data

(U-Th)/He results from the Mt. Jara transect. Each color represents one sample and the plots illustrate trends with grain size, eU, elevation, and ZHe ages. Trends for each sample are shown by colored dotted lines.

Figure 3-5: Mt. Baygoura (U-Th)/He data

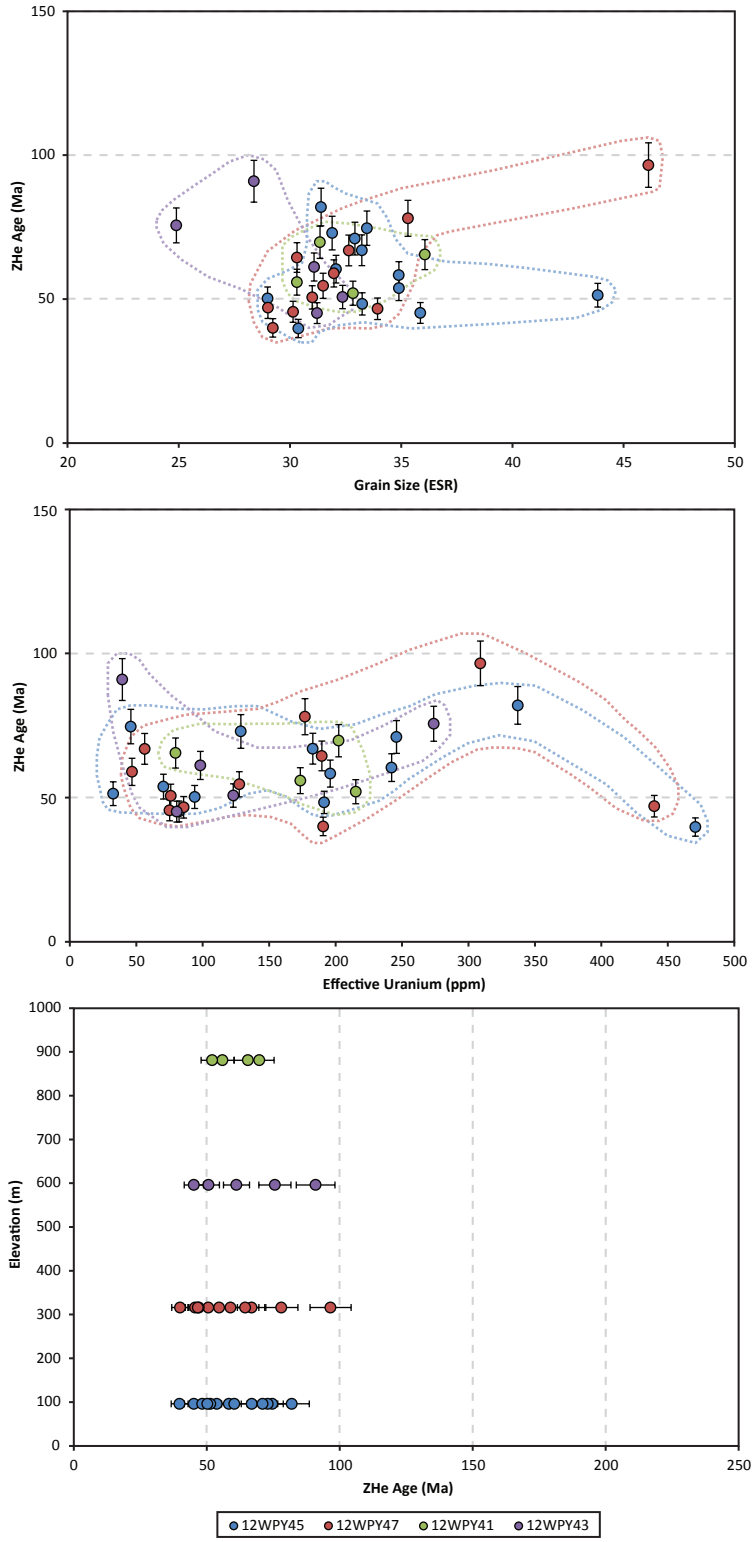


Figure 3-5: Mt. Baygoura (U-Th)/He data

(U-Th)/He results from the Mt. Baygoura transect. Each color represents one sample and the plots illustrate trends with grain size, eU, elevation, and ZHe ages. Trends for each sample are shown by colored dotted lines.

Figure 3-6: Labourd massif (U-Th)/He data

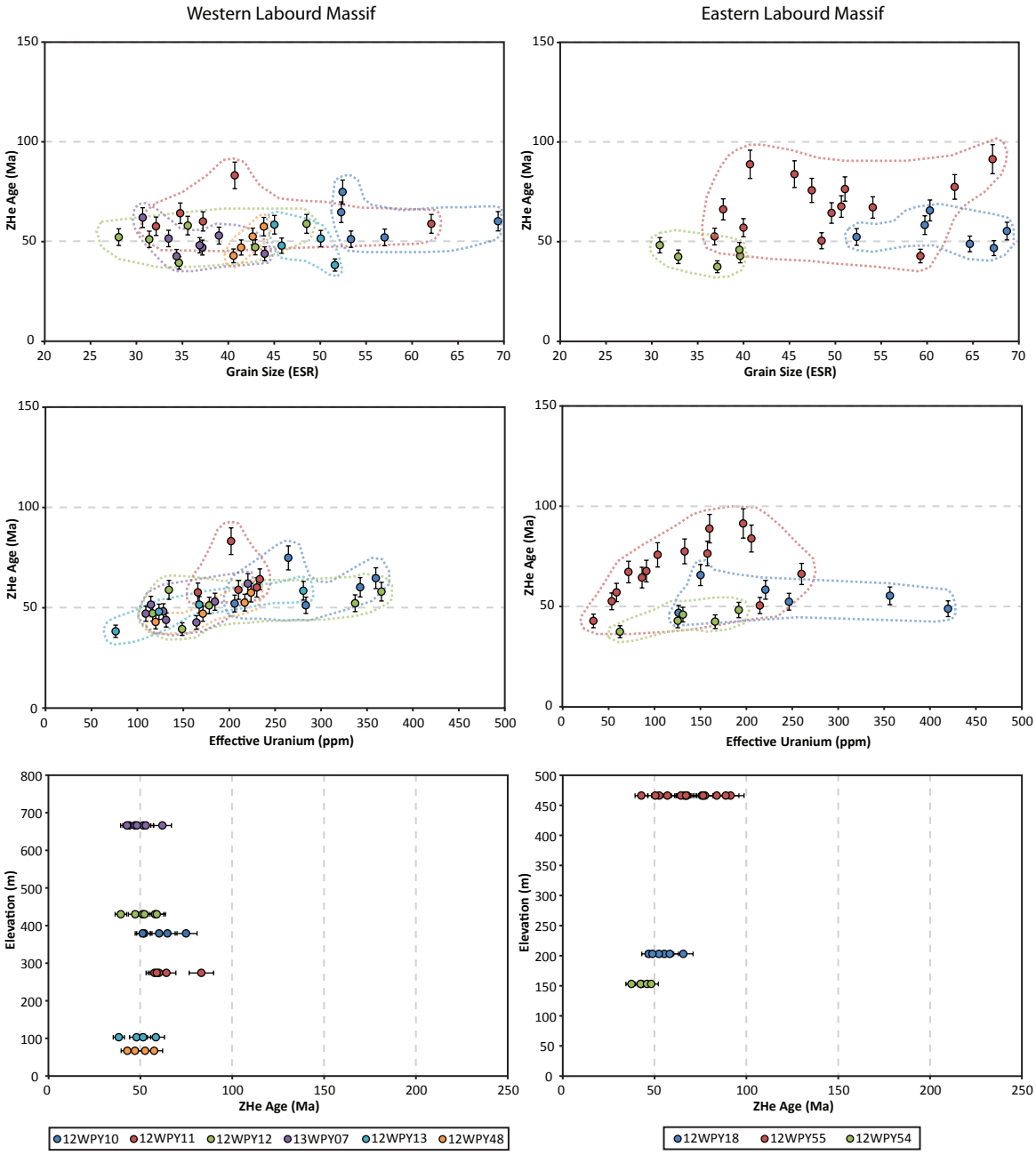


Figure 3-6: Labourd massif (U-Th)/He data

(U-Th)/He results from the Labourd massif. Each color represents one sample and the plots illustrate trends with grain size, eU, elevation, and ZHe ages. Trends for each sample are shown by colored dotted lines. Samples are separated base on different trends from the western and eastern sides of the massif.

Figure 3-7: North Mauléon Basin sediments (U-Th)/He data

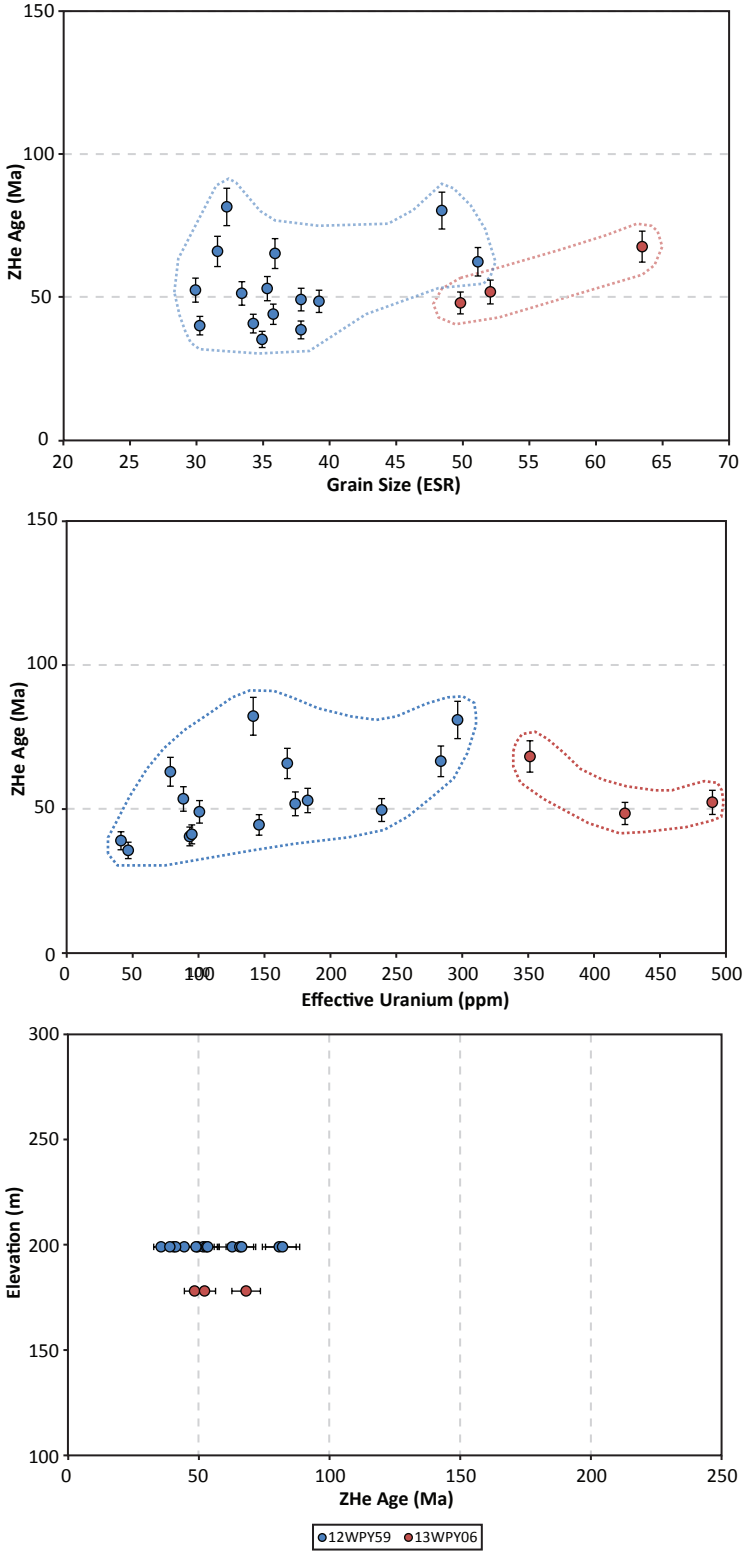


Figure 3-7: North Mauléon Basin sediments (U-Th)/He data

(U-Th)/He results from the North Mauléon basin strata. Each color represents one sample and the plots illustrate trends with grain size, eU, elevation, and ZHe ages. Trends for each sample are shown by colored dotted lines.

Figure 3-8: Mauléon Basin pre- to syn-rift interpretation

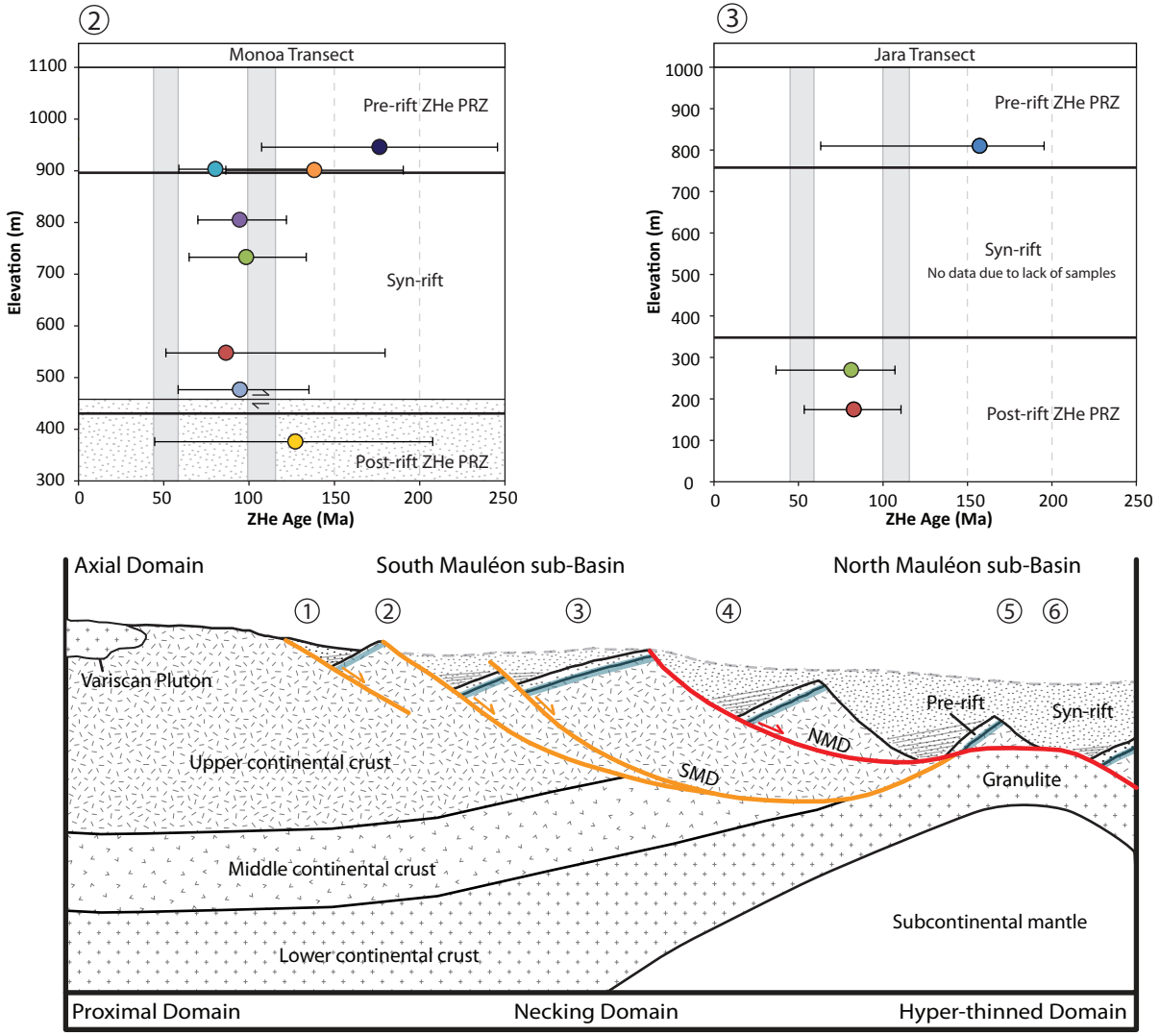


Figure 3-8: Mauléon Basin pre- to syn-rift interpretation

The data from each transect that show pre- to syn-rift ages are simplified to show the most abundant age in the sample as determined by KDE plot, illustrated by the point, and the full data spectrum, illustrated by error bars. Numbers for each transect are equivalent to numbers on the cross section and show the lateral extent of the data. The data points from each transect can also be used to illustrate the location of the pre-rift ZHe PRZ which can be extrapolated across the basin.

Figure 3-9: Mt. Monoa and Mt. Jara reconstruction

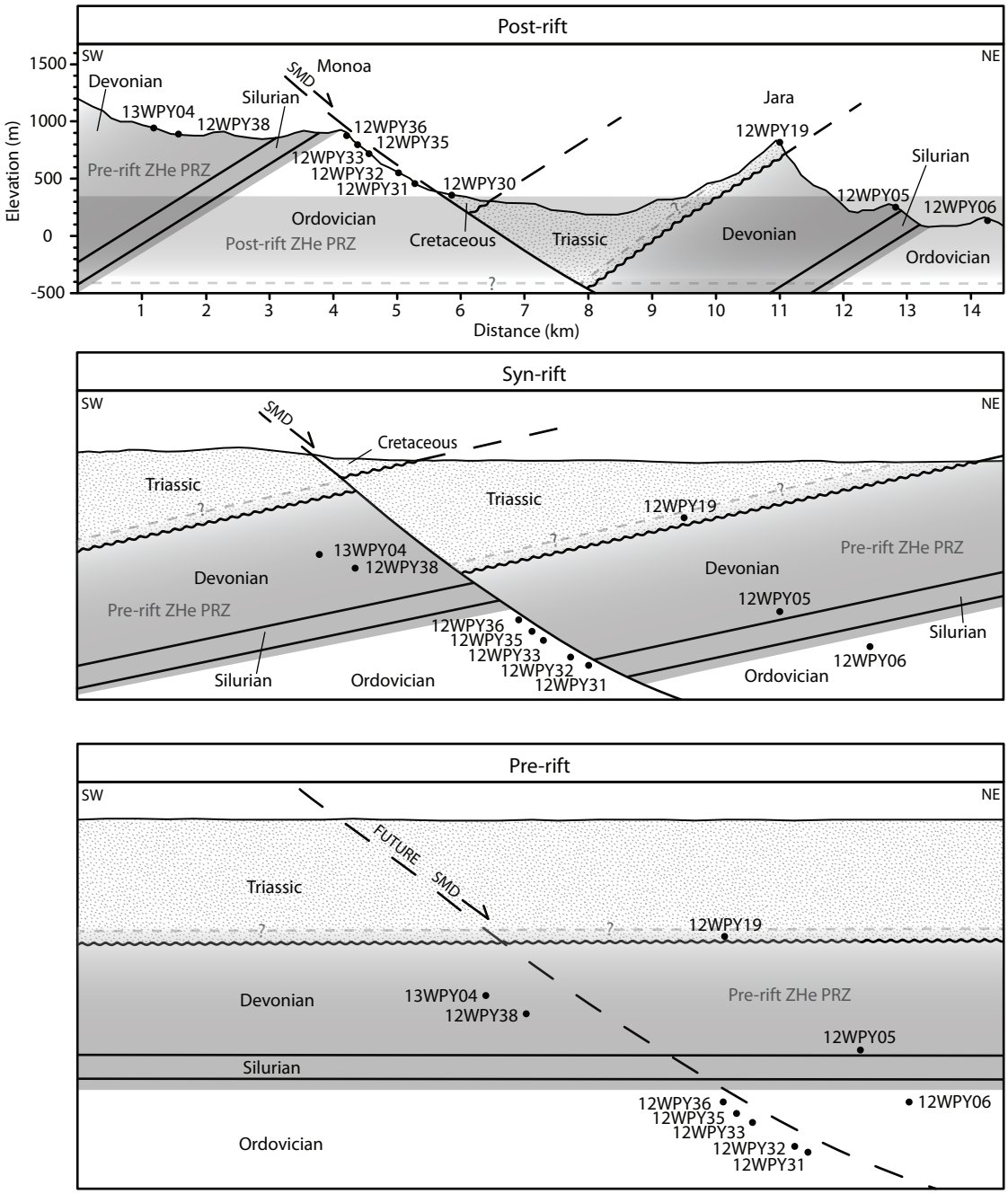


Figure 3-9: Mt. Monoa and Mt. Jara reconstruction

Based on data from the Mt. Monoa and Mt. Jara transects, the pre-rift ZHe PRZ and the post-rift ZHe PRZ can be illustrated on a cross section and then tracked through the rifting steps.

Figure 3-10: Mt. Monoa thermochronometric inverse modeling results

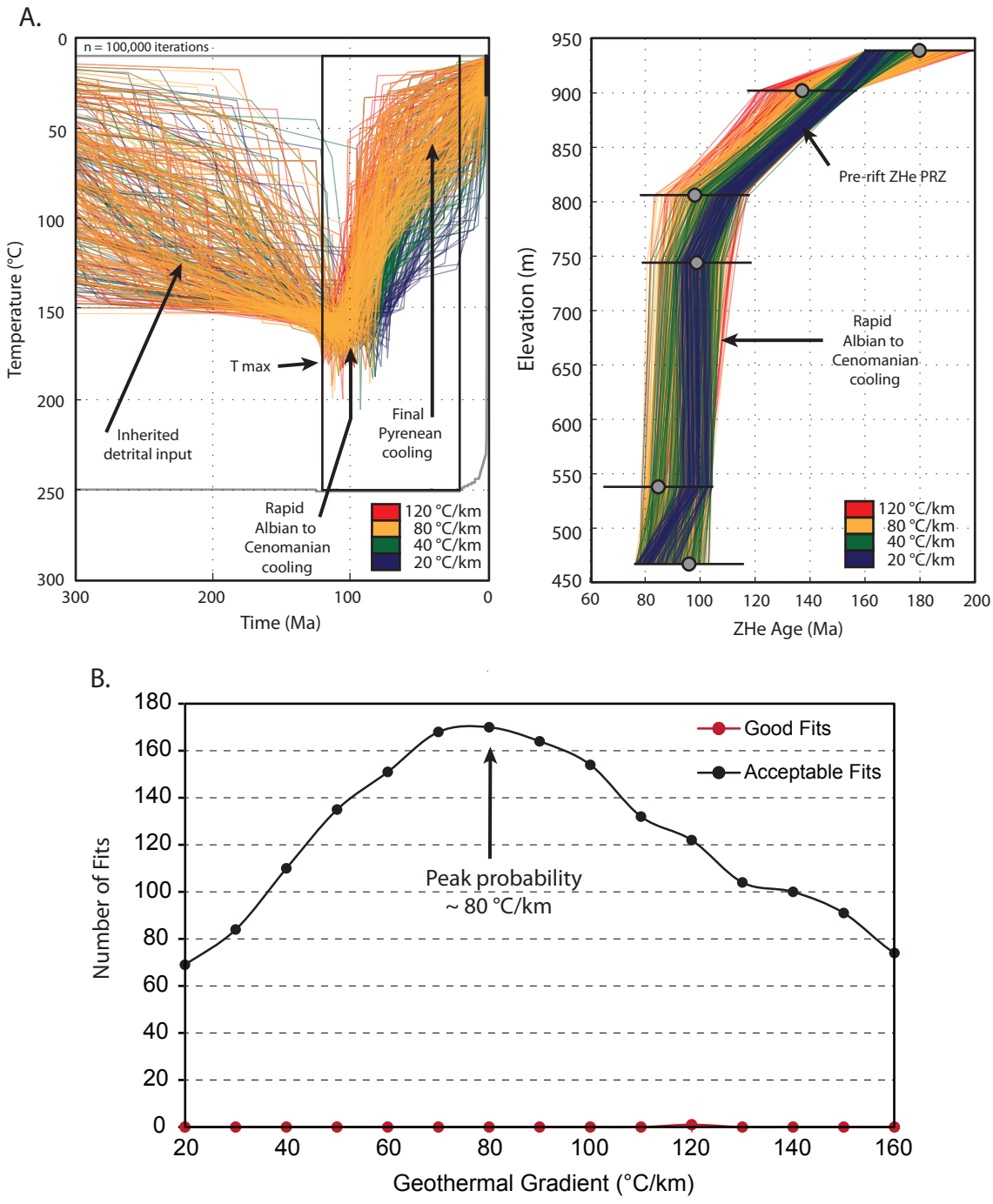
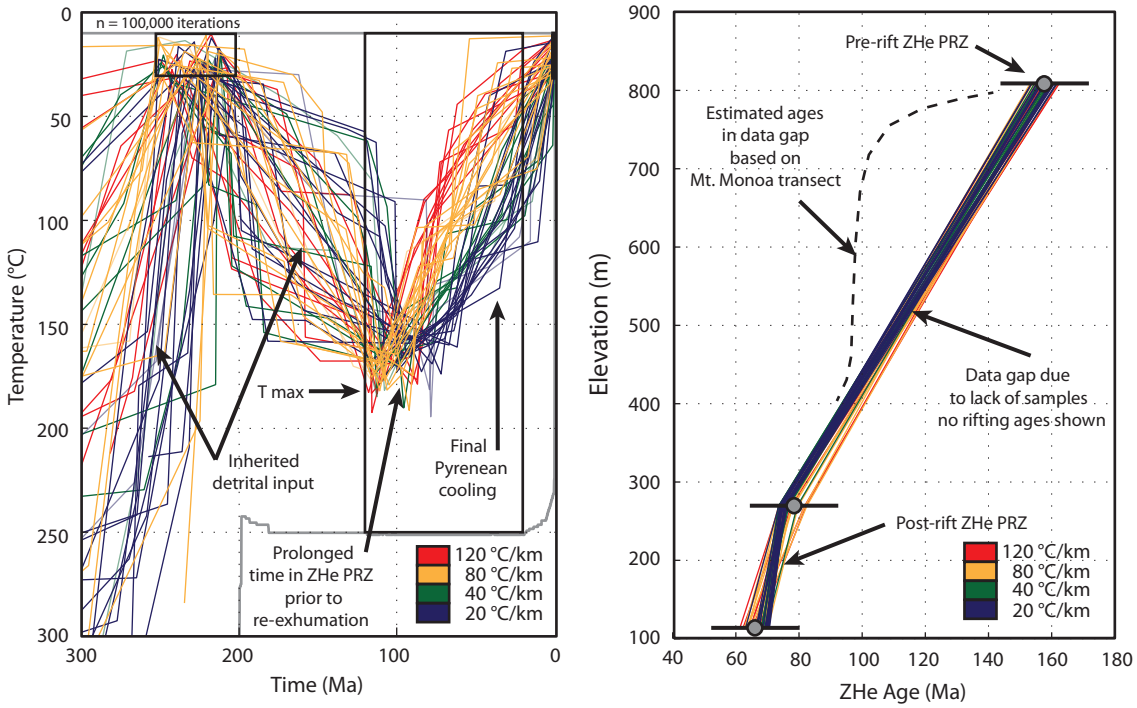


Figure 3-10: Mt. Monoa thermochronometric inverse modeling results

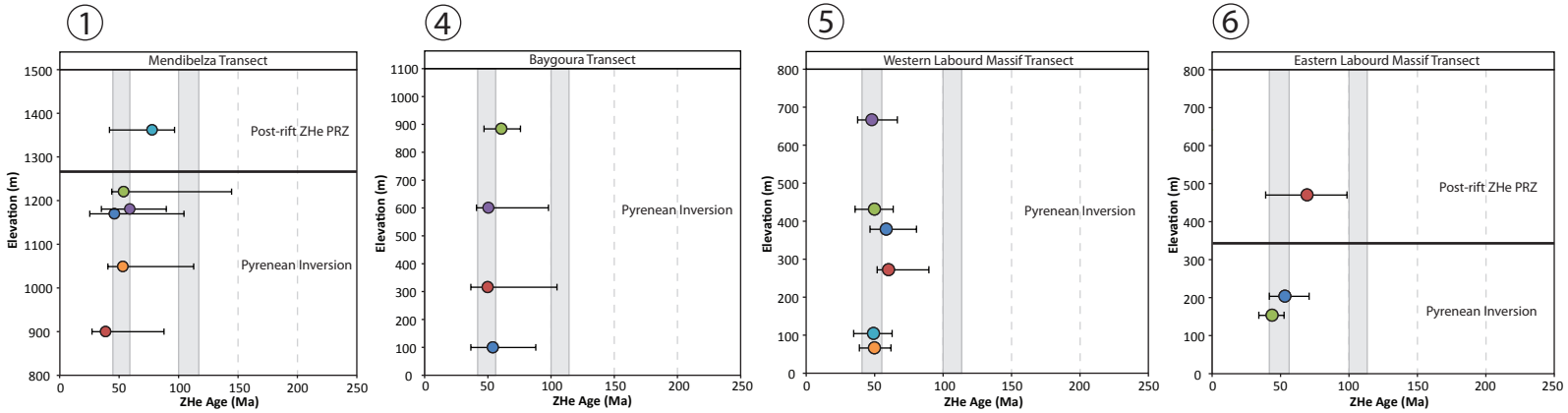
A) Acceptable time-temperature paths determined by the program based on initial constrains of Paleozoic depositional age and temporal constraints on rifting/inversion. Different colors illustrate different geothermal gradients that fit the data. B) All of the fits plotted based on the tested geothermal gradients, the best fit geothermal gradient is equal to ~80°C/km.

Figure 3-11: Mt. Jara thermochronometric inverse modeling results



Good time-temperature path fits determined by the program were based on initial constrains of Triassic depositional age and temporal constraints on rifting/inversion. Different colors illustrate different geothermal gradients that fit the data.

Figure 3-12: Mauléon Basin post-rift interpretation



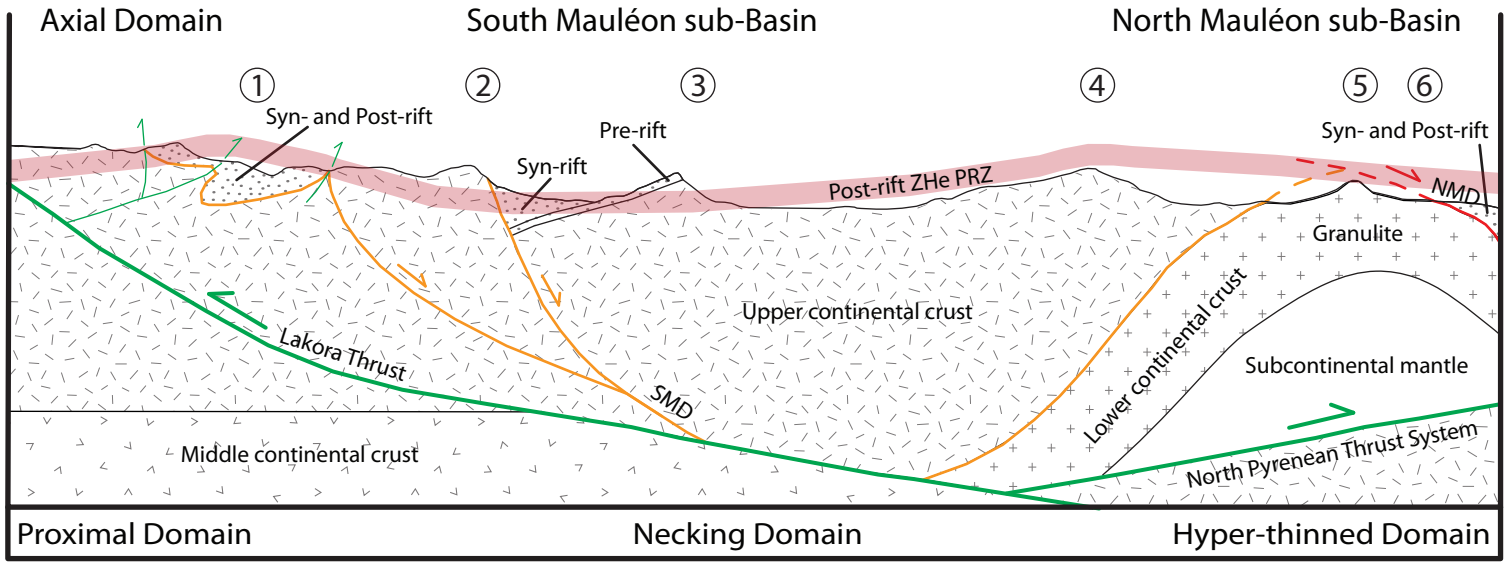
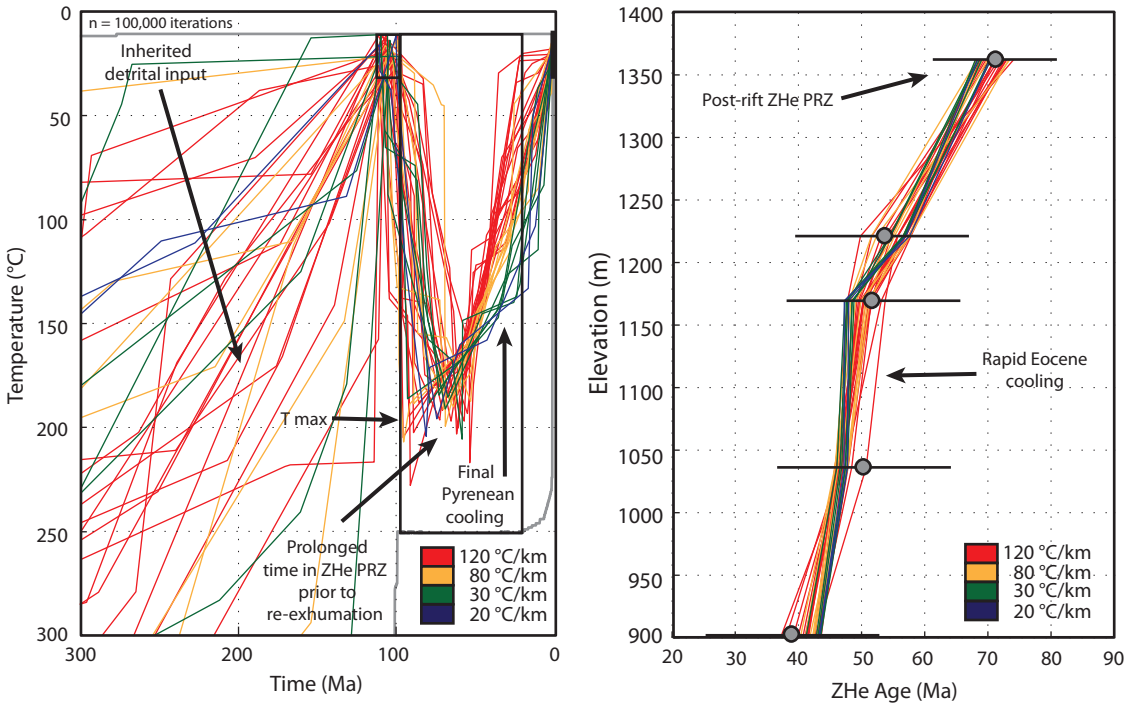


Figure 3-12: Mauléon Basin post-rift interpretation

The data from each transect that show post-rift ages are simplified to show the most abundant age in the sample as determined by KDE plot, illustrated by the point, and the full data spectrum, illustrated by error bars. Numbers for each transect are equivalent to numbers on the cross section and show the lateral extent of the data. The data points from each transect can also be used to illustrate the location of the post-rift ZHe PRZ across the basin.

Figure 3-13: Mendibelza thermochronometric inverse modeling results



Good time-temperature path fits determined by the program were based on initial constrains of Albian depositional age and temporal constraints on rifting/inversion. Different colors illustrate different geothermal gradients that fit the data.

Figure 3-14: Cretaceous Overburden estimate

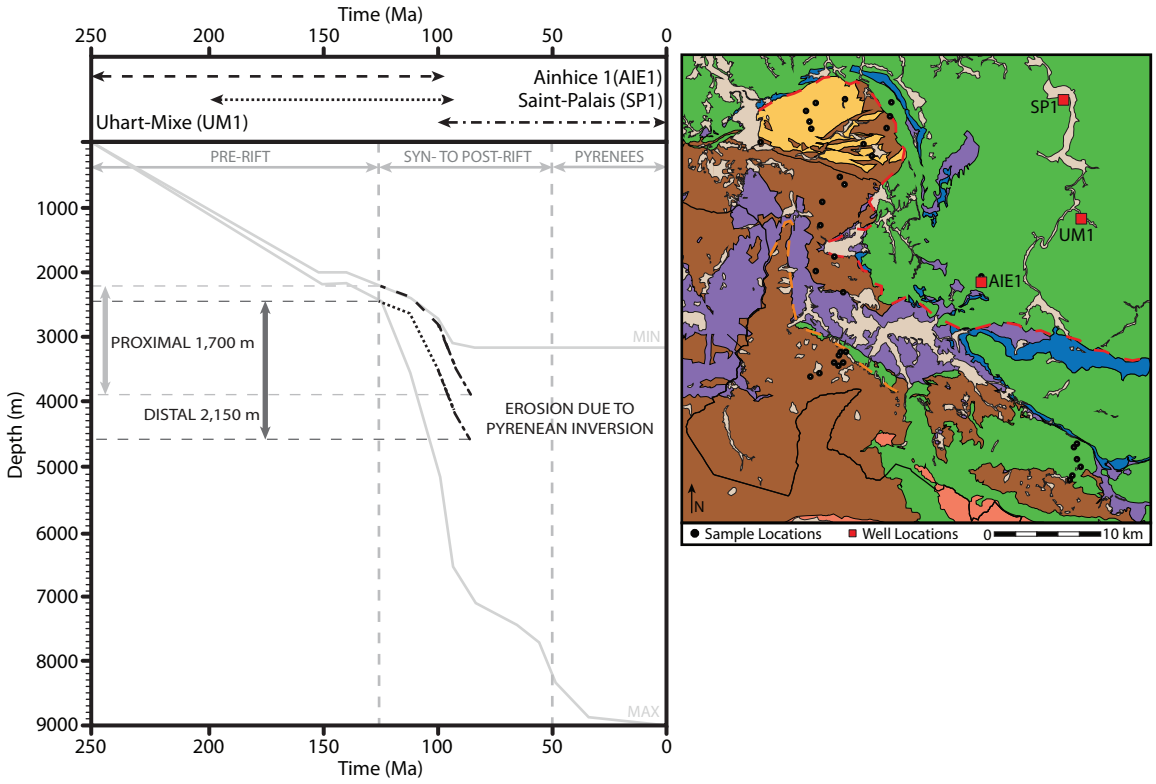
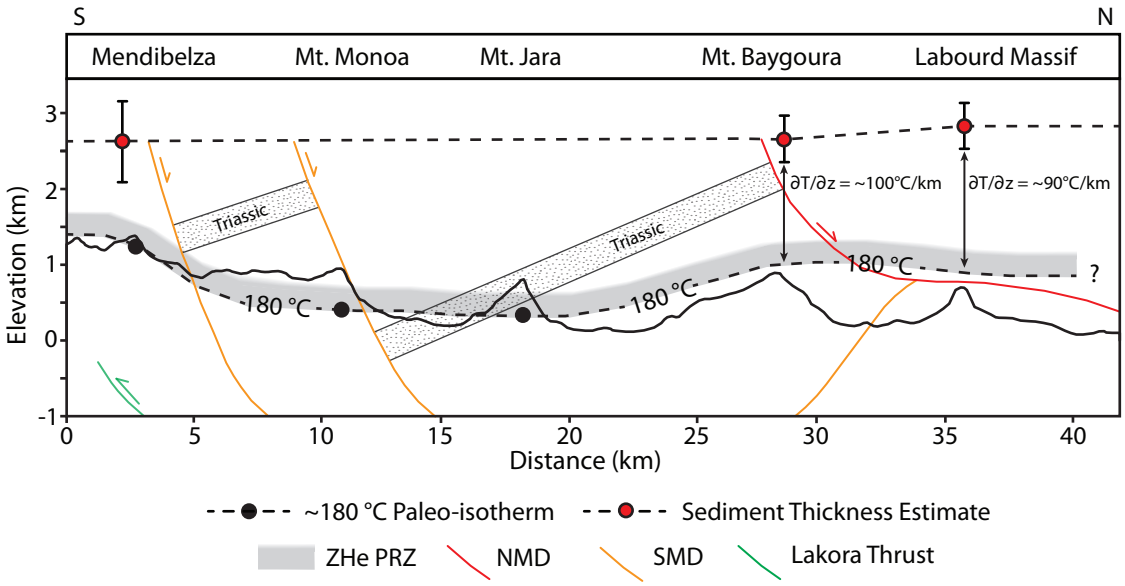


Figure modified from Vacherat et al. (2014), where we use a similar technique but only use the three boreholes closest to our sampling locations that have a syn-rift record, AIE1, SP1 and UM1. We use the maximum and minimum curves established by Vacherat et al. (2014), for the pre-rift thicknesses interpreting that the minimum is likely representative of the more proximal areas and the maximum of the more distal. We then use borehole data from AIE1 as a proxy for the more proximal hyper-thinned domain and borehole data from SP1 as a proxy for the more distal hyper-thinned domain. Neither AIE1 nor SP1 show post-rift deposits so UM1 data is used to estimate the thicknesses for late Cretaceous deposits. Therefore the proximal thickness is interpreted to be a proxy for the sedimentary cover over Mt. Baygoura and the distal thickness is interpreted to be a proxy for sedimentary cover over the Labourd massif. Thicknesses presented are interpreted to be minimum thickness estimates.

Figure 3-15: Overburden cross-section



Transect data for the location of the post-rift ZHe PRZ and the ~180°C paleo-isotherm is tracked across the basin and is combined with sediment thickness estimates from Figure 14 to estimate the geothermal gradients prior to Pyrenean inversion in the hyperthinned domain. These geothermal gradients are minimum estimates based on available data.

Figure 3-16: Mauléon Basin reconstruction

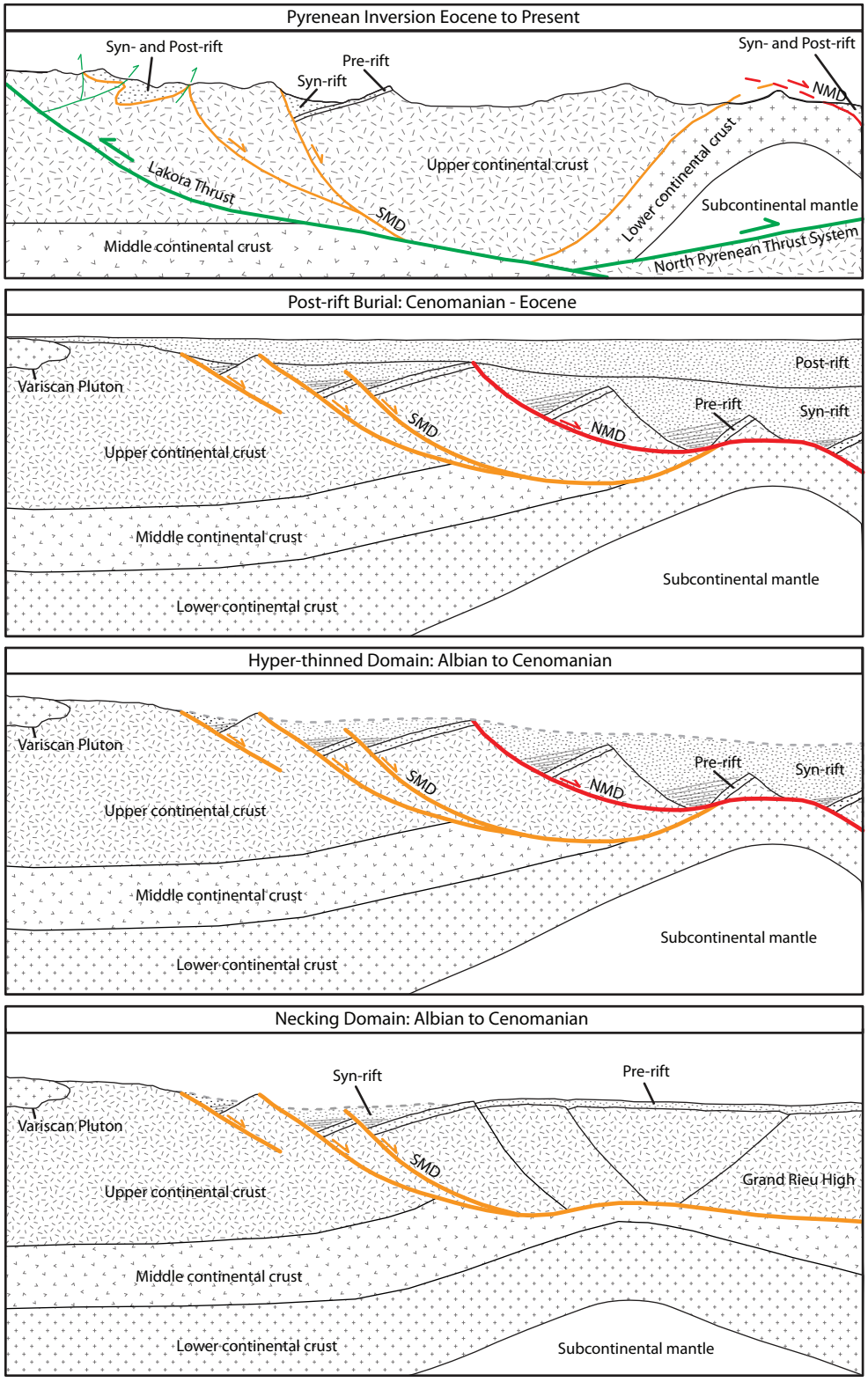


Figure 3-16: Mauléon Basin reconstruction

Constraints developed are shown in the time slice representation of the evolution of the Mauléon Basin from the onset of rifting through Pyrenean inversion.

Appendix A

Mauléon Basin sample locations

Sample	Latitude (N)	Longitude (E)	Elevation (m)
12WPY01	43°12'19.8''	01°19'38.1"	125
12WPY05	43°13'50.0''	01°18'06.7"	113
12WPY06	43°13'04.8''	01°19'24.6"	268
12WPY07	43°13'32.5''	01°15'20.4"	375
12WPY08	43°18'08.7''	01°14'25.5"	305
12WPY10	43°21'11.9''	01°20'11.8"	379
12WPY11	43°21'36.9''	01°19'30.8"	274
12WPY12	43°20'18.8''	01°19'52.8"	430
12WPY13	43°21'48.66"	01°17'32.33"	103
12WPY18	43°18'54.5''	01°15'35.7"	203
12WPY19	43°11'59.4''	01°17'30.7"	807
12WPY20	43°02'16.3''	01°01'39.4"	1295
12WPY21	43°02'24.3''	01°01'39.2"	1363
12WPY23	43°02'41.5''	01°01'25.5"	1221
12WPY24	43°03'04.4''	01°00'55.9"	1169
12WPY25	43°03'31.1''	01°01'08.3"	1180
12WPY26	43°04'08.0''	01°01'19.8"	1035
12WPY27	43°04'19.7''	01°01'16.6"	898
12WPY28	43°04'20.5''	01°01'12.0"	900
12WPY30	43°09'01.3''	01°17'16.6"	373
12WPY31	43°09'02.0''	01°17'38.8"	467
12WPY32	43°08'52.2''	01°17'44.6"	538
12WPY33	43°08'29.3''	01°17'30.5"	744
12WPY35	43°08'21.4''	01°17'48.7"	806
12WPY36	43°08'27.4''	01°18'06.5"	903
12WPY38	43°07'56.2''	01°19'06.3"	902
12WPY41	43°17'28.2''	01°17'31.9"	881
12WPY42	43°17'41.1''	01°17'28.9"	803
12WPY43	43°17'51.6''	01°17'47.8"	596
12WPY44	43°18'00.4''	01°17'37.9"	534
12WPY45	43°15'26.2''	01°19'09.3"	96
12WPY46	43°16'11.9''	01°18'59.2"	416
12WPY47	43°16'34.5''	01°19'02.2"	316

Sample	Latitude (N)	Longitude (E)	Elevation (m)
12WPY48	43°19'37.6''	01°23'21.7"	67
12WPY49	43°15'20.4''	01°15'38.1"	179
12WPY54	43°20'55.6''	01°14'15.3"	153
12WPY55	43°20'20.1''	01°14'36.2"	466
12WPY56	43°20'14.2''	01°14'31.0"	466
12WPY57	43°18'27.6''	01°00'33.2"	64
12WPY58	43°15'28.4''	01°02'30.9"	100
12WPY59	43°12'49.8''	01°07'55.1"	199
13WPY01	43°09'08.5''	01°24'55.0"	1089
13WPY02	43°09'13.2''	01°24'33.8"	952
13WPY04	43°07'44.9''	01°19'41.6"	939
13WPY05	43°19'33.2''	01°16'10.3"	212
13WPY06	43°21'40.1''	01°14'12.4"	178
13WPY07	43°20'39.5''	01°19'56.3"	666

Mauléon Basin KDE Bandwidth

Sample	0-1,200 Ma Bandwidth	0-3,600 Ma Bandwidth
12WPY01	*	20
12WPY05	*	20
12WPY06	*	25
12WPY07	15	20
12WPY08	5	5
12WPY10	5	5
12WPY11	20	25
12WPY12	25	30
12WPY13	20	20
12WPY18	15	15
12WPY19	*	15
12WPY20	*	25
12WPY21	15	20
12WPY23	15	15
12WPY24	15	20
12WPY25	15	25
12WPY26	15	25
12WPY27	15	25
12WPY28	20	30
12WPY30	25	35
12WPY31	*	25
12WPY32	*	30
12WPY33	*	30
12WPY35	*	30
12WPY36	*	30
12WPY38	*	25
12WPY41	*	25
12WPY42	*	25
12WPY43	*	30
12WPY44	*	25
12WPY45	*	25
12WPY46	*	30
12WPY47	*	30
12WPY48	5	5
12WPY49	15	20
12WPY54	15	20

Sample	0-1,200 Ma Bandwidth	0-3,600 Ma Bandwidth
12WPY55	*	25
12WPY56	*	25
12WPY57	15	20
12WPY58	15	20
12WPY59	20	30
13WPY01	*	25
13WPY02	*	25
13WPY04	*	25
13WPY05	15	25
13WPY06	15	25
13WPY07	15	15
Granulite Cores	20	*
Granulite Rims	10	*
Triassic	10	*
Permian	15	*
Carboniferous	15	*
Devonian	15	*
Ordovician	10	*

* No KDE plot

Mid-lower crust granulite U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY08_1	1612.00	9.30	0.34940	0.00530	0.04375	0.00033	0.40470	304.6	3.9	276.0	2.0	509	27	276.0	2.0	9.4	Single Age
12WPY08_2	1688.00	41.90	0.39200	0.01000	0.04651	0.00052	0.38712	335.4	7.3	293.1	3.2	620	50	DISC	DISC	12.6	Single Age
12WPY08_3	1725.00	19.70	0.36430	0.00410	0.04572	0.00043	0.57609	315.4	3.1	288.2	2.6	519	21	288.2	2.6	8.6	Single Age
12WPY08_4	1351.00	142.30	0.33400	0.00320	0.04511	0.00045	0.64977	292.6	2.4	284.4	2.8	359	19	284.4	2.8	2.8	Single Age
12WPY08_5	2500.00	373.00	0.33030	0.00260	0.04477	0.00034	0.69204	289.7	2.0	282.3	2.1	344	13	282.3	2.1	2.6	Single Age
12WPY08_6	2200.00	32.50	0.38100	0.00750	0.04404	0.00053	0.41339	328.2	5.6	277.8	3.3	702	62	DISC	DISC	15.4	Single Age
12WPY08_7	1897.00	78.10	0.50500	0.02300	0.04733	0.00048	0.62635	413.0	15.0	298.1	3.0	1081	76	DISC	DISC	27.8	Single Age
12WPY08_8	2410.00	201.50	0.34540	0.00340	0.04642	0.00037	0.65370	301.2	2.6	292.5	2.3	360	16	292.5	2.3	2.9	Single Age
12WPY08_9	1525.00	180.90	0.32800	0.00300	0.04505	0.00052	0.71097	288.0	2.3	284.0	3.2	310	19	284.0	3.2	1.4	Single Age
12WPY08_10	2030.00	69.00	0.40300	0.01600	0.04910	0.00120	0.85991	343.0	11.0	308.6	7.1	573	44	DISC	DISC	10.0	Single Age
12WPY08_11	1942.00	155.20	0.35890	0.00530	0.04690	0.00048	0.70074	311.2	4.0	295.4	2.9	428	23	295.4	2.9	5.1	Single Age
12WPY08_12	2670.00	162.00	0.34130	0.00380	0.04483	0.00036	0.65445	298.1	2.9	282.7	2.2	419	20	282.7	2.2	5.2	Single Age
12WPY08_13	1340.00	109.00	0.35000	0.00720	0.04689	0.00070	0.76886	305.1	5.3	295.4	4.3	384	29	295.4	4.3	3.2	Single Age
12WPY08_14	1440.00	40.00	0.34670	0.00640	0.04624	0.00047	0.54738	302.1	4.8	291.4	2.9	371	32	291.4	2.9	3.5	Single Age
12WPY08_15	1980.00	65.00	0.35840	0.00970	0.04428	0.00039	0.27475	310.5	7.2	279.3	2.4	551	57	DISC	DISC	10.0	Single Age
12WPY08_16	2690.00	22.80	0.45700	0.02100	0.04416	0.00067	0.61869	382.0	15.0	278.5	4.1	1047	77	DISC	DISC	27.1	Single Age
12WPY08_17	2101.00	29.80	0.40350	0.00870	0.04443	0.00065	0.41574	343.9	6.3	280.2	4.0	785	41	DISC	DISC	18.5	Single Age
12WPY08_18	1057.00	148.00	0.33890	0.00280	0.04710	0.00041	0.50675	296.3	2.1	296.7	2.5	300	18	296.7	2.5	0.1	Single Age
12WPY08_19	1308.00	37.60	0.37660	0.00990	0.04454	0.00077	0.06692	324.9	7.4	280.9	4.7	633	71	DISC	DISC	13.5	Single Age
12WPY08_20	2000.00	88.00	0.36680	0.00890	0.04298	0.00045	0.28334	317.6	6.7	271.3	2.8	658	51	DISC	DISC	14.6	Single Age
12WPY08_21	2080.00	103.40	0.36660	0.00570	0.04636	0.00059	0.65683	317.5	4.3	292.1	3.7	520	24	292.1	3.7	8.0	Single Age
12WPY08_22	2050.00	27.40	0.44100	0.01800	0.04376	0.00058	0.50315	369.0	12.0	276.1	3.6	950	100	DISC	DISC	25.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY08_23	1534.00	87.80	0.37800	0.00850	0.04803	0.00058	0.65415	326.0	6.4	302.4	3.6	496	34	302.4	3.6	7.2	Single Age
12WPY08_24	393.00	30.00	0.43400	0.03700	0.05790	0.00400	0.80681	365.0	26.0	363.0	24.0	443	52	363.0	24.0	0.5	Rim
12WPY08_24	102.20	1.28	0.77600	0.01400	0.09320	0.00140	0.57265	584.1	7.6	574.6	8.4	609	26	574.6	8.4	1.6	Core
12WPY08_25	1730.00	130.00	0.35540	0.00440	0.04604	0.00052	0.45419	308.7	3.3	290.1	3.2	446	28	290.1	3.2	6.0	Single Age
12WPY08_26	1567.00	42.00	0.36820	0.00830	0.04436	0.00045	0.25368	317.9	6.2	279.8	2.8	594	47	DISC	DISC	12.0	Single Age
12WPY08_27	946.00	57.40	0.34730	0.00430	0.04683	0.00056	0.65126	302.6	3.3	295.0	3.5	372	19	295.0	3.5	2.5	Single Age
12WPY08_28	1520.00	106.00	0.33960	0.00780	0.04540	0.00110	0.75520	296.7	5.9	286.0	6.8	382	34	286.0	6.8	3.6	Single Age
12WPY08_29	3050.00	160.20	0.33820	0.00800	0.03932	0.00043	0.75573	295.6	6.1	248.6	2.7	700	37	DISC	DISC	15.9	Single Age
12WPY08_30	2222.00	59.00	0.36120	0.00700	0.04531	0.00039	0.54485	313.5	5.1	285.7	2.4	521	36	285.7	2.4	8.9	Single Age
12WPY08_31	2070.00	11.40	0.41210	0.00490	0.04391	0.00043	0.46412	350.3	3.5	277.0	2.7	864	25	DISC	DISC	20.9	Single Age
12WPY08_32	2280.00	96.00	0.32100	0.00190	0.04417	0.00031	0.72984	282.6	1.4	278.6	1.9	310	14	278.6	1.9	1.4	Single Age
12WPY08_33	1470.00	205.00	0.31880	0.00420	0.04387	0.00057	0.82185	280.8	3.2	276.7	3.5	310	17	276.7	3.5	1.5	Single Age
12WPY08_34	2106.00	65.40	0.37400	0.01000	0.04375	0.00032	0.30321	321.7	7.7	276.0	2.0	647	57	DISC	DISC	14.2	Single Age
12WPY08_35	884.00	67.00	0.34780	0.00550	0.04771	0.00075	0.86138	302.9	4.2	300.4	4.6	306	19	300.4	4.6	0.8	Single Age
12WPY08_36	1449.00	45.20	0.43020	0.00910	0.04680	0.00040	0.47313	362.9	6.5	294.8	2.5	834	36	DISC	DISC	18.8	Single Age
12WPY08_37	1670.00	24.90	0.33500	0.00310	0.04445	0.00044	0.62155	293.3	2.3	280.4	2.7	386	19	280.4	2.7	4.4	Single Age
12WPY08_38	1750.00	92.00	0.38700	0.01000	0.04562	0.00055	0.09160	332.7	7.6	287.5	3.4	626	57	DISC	DISC	13.6	Single Age
12WPY08_39	1782.00	90.00	0.32640	0.00370	0.04321	0.00029	0.42700	286.7	2.8	272.7	1.8	403	24	272.7	1.8	4.9	Single Age
12WPY08_40	1240.00	140.00	0.33550	0.00540	0.04589	0.00074	0.87589	293.5	4.1	289.2	4.5	332	17	289.2	4.5	1.5	Single Age
12WPY08_41	1415.00	50.00	0.34550	0.00440	0.04308	0.00033	0.27329	301.3	3.3	271.9	2.1	513	27	271.9	2.1	9.8	Single Age
12WPY08_42	2920.00	131.40	0.39140	0.00990	0.04419	0.00050	0.17643	334.9	7.1	278.7	3.1	737	56	DISC	DISC	16.8	Single Age
12WPY08_43	1480.00	237.00	0.32570	0.00320	0.04439	0.00042	0.68099	286.2	2.5	280.0	2.6	315	18	280.0	2.6	2.2	Single Age
12WPY08_44	1392.00	98.20	0.36510	0.00450	0.04612	0.00044	0.61674	315.9	3.4	290.6	2.7	492	22	290.6	2.7	8.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY08_45	1940.00	16.40	0.41290	0.00710	0.04257	0.00067	0.45407	350.7	5.1	268.7	4.2	931	39	DISC	DISC	23.4	Single Age
12WPY08_46	2840.00	339.00	0.30450	0.00250	0.04131	0.00033	0.55683	269.9	2.0	260.9	2.1	340	15	260.9	2.1	3.3	Single Age
12WPY08_47	2312.00	235.80	0.31740	0.00430	0.04320	0.00061	0.48320	279.9	3.3	272.6	3.8	338	24	272.6	3.8	2.6	Rim
12WPY08_47	8300.00	40.30	0.68300	0.02700	0.09420	0.00410	0.95273	528.0	16.0	580.0	24.0	317	31	580.0	24.0	9.8	Core
12WPY08_48	1110.00	27.10	0.33250	0.00400	0.04509	0.00045	0.19654	291.4	3.1	284.3	2.8	345	22	284.3	2.8	2.4	Single Age
12WPY08_49	1910.00	109.00	0.41800	0.02200	0.04543	0.00038	0.36721	352.0	15.0	286.4	2.3	751	99	DISC	DISC	18.6	Single Age
12WPY08_50	2207.00	144.50	0.32210	0.00390	0.04413	0.00055	0.47648	284.5	3.0	278.4	3.4	331	26	278.4	3.4	2.1	Single Age
12WPY08_51	2210.00	8.70	0.38340	0.00950	0.04139	0.00072	0.12310	329.0	7.0	261.4	4.5	853	59	DISC	DISC	20.5	Single Age
12WPY08_52	1571.00	118.20	0.32980	0.00370	0.04430	0.00048	0.73937	289.3	2.8	279.4	3.0	377	18	279.4	3.0	3.4	Single Age
12WPY08_53	1898.00	27.00	0.43300	0.01200	0.04304	0.00044	0.05676	364.7	8.7	271.7	2.7	991	60	DISC	DISC	25.5	Single Age
12WPY08_54	1860.00	101.00	0.34090	0.00470	0.04530	0.00045	0.68090	297.7	3.5	285.6	2.8	381	20	285.6	2.8	4.1	Single Age
12WPY08_55	2154.00	11.54	0.41810	0.00690	0.04230	0.00040	0.22222	354.4	4.9	267.0	2.5	988	31	DISC	DISC	24.7	Single Age
12WPY08_56	1670.00	134.20	0.32250	0.00340	0.04428	0.00050	0.75592	283.8	2.6	279.3	3.1	323	18	279.3	3.1	1.6	Single Age
12WPY08_57	1667.00	27.40	0.39550	0.00930	0.04424	0.00048	0.46920	337.9	6.7	279.0	3.0	772	44	DISC	DISC	17.4	Single Age
12WPY08_58	1630.00	49.10	0.36200	0.01200	0.04468	0.00049	0.50988	312.6	8.6	281.8	3.0	546	60	281.8	3.0	9.9	Single Age
12WPY08_59	1233.00	166.00	0.31480	0.00280	0.04297	0.00032	0.49343	277.8	2.1	271.4	2.0	334	18	271.4	2.0	2.3	Single Age
12WPY08_60	1662.00	25.30	0.35340	0.00600	0.04179	0.00043	0.23488	307.0	4.5	263.9	2.7	672	38	DISC	DISC	14.0	Single Age
12WPY08_61	3140.00	338.20	0.31150	0.00280	0.04278	0.00041	0.61982	275.3	2.2	270.0	2.6	324	16	270.0	2.6	1.9	Single Age
12WPY08_62	2709.00	138.90	0.33930	0.00410	0.04467	0.00048	0.49561	296.6	3.1	281.7	2.9	418	22	281.7	2.9	5.0	Single Age
12WPY08_63	1663.00	159.80	0.32880	0.00310	0.04443	0.00039	0.56885	288.6	2.4	280.2	2.4	355	19	280.2	2.4	2.9	Single Age
12WPY08_64	1202.00	59.50	0.33280	0.00390	0.04440	0.00044	0.77586	292.0	3.0	280.0	2.7	380	16	280.0	2.7	4.1	Single Age
12WPY08_65	1431.00	85.60	0.31650	0.00330	0.04350	0.00045	0.76813	279.5	2.6	274.5	2.8	331	15	274.5	2.8	1.8	Single Age
12WPY08_66	1256.00	163.90	0.34470	0.00370	0.04707	0.00061	0.40055	300.7	2.8	296.5	3.7	335	21	296.5	3.7	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY08_67	1455.00	75.00	0.34290	0.00490	0.04531	0.00055	0.47130	299.3	3.7	285.7	3.4	412	33	285.7	3.4	4.5	Single Age
12WPY08_68	719.00	94.20	0.36200	0.00480	0.04936	0.00053	0.62440	314.0	3.5	310.6	3.3	328	24	310.6	3.3	1.1	Single Age
12WPY08_69	1894.00	47.60	0.37750	0.00830	0.04487	0.00060	0.58130	324.8	6.1	282.9	3.7	642	35	DISC	DISC	12.9	Single Age
12WPY08_70	1623.00	101.00	0.37100	0.01200	0.04363	0.00099	0.49915	320.0	8.5	275.2	6.1	663	59	DISC	DISC	14.0	Single Age
12WPY08_71	1814.00	118.00	0.31750	0.00340	0.04242	0.00046	0.81215	279.9	2.6	267.8	2.9	371	15	267.8	2.9	4.3	Single Age
12WPY08_72	1978.00	48.80	0.36010	0.00600	0.04362	0.00064	0.59958	312.7	4.3	275.2	4.0	593	31	DISC	DISC	12.0	Single Age
12WPY08_73	2457.00	6.26	0.45500	0.01100	0.04396	0.00055	0.28662	381.2	7.9	277.3	3.4	1088	47	DISC	DISC	27.3	Single Age
12WPY08_74	1699.00	18.10	0.38400	0.00550	0.04449	0.00042	0.45665	329.8	4.0	280.6	2.6	694	26	DISC	DISC	14.9	Single Age
12WPY08_75	1800.00	230.00	0.32740	0.00360	0.04498	0.00066	0.60916	287.9	2.7	283.6	4.1	333	24	283.6	4.1	1.5	Single Age
12WPY08_76	1750.00	158.00	0.32850	0.00540	0.04340	0.00059	0.56553	288.3	4.1	273.9	3.7	387	22	273.9	3.7	5.0	Single Age
12WPY08_77	2410.00	146.00	0.34860	0.00380	0.04465	0.00038	0.35084	303.6	2.9	281.6	2.4	486	26	281.6	2.4	7.2	Single Age
12WPY08_78	1076.00	142.70	0.34130	0.00460	0.04685	0.00064	0.76669	298.0	3.5	295.1	3.9	338	20	295.1	3.9	1.0	Single Age
12WPY08_79	1861.00	175.00	0.32990	0.00330	0.04428	0.00043	0.47785	289.4	2.6	279.3	2.6	363	23	279.3	2.6	3.5	Single Age
12WPY08_80	1642.00	161.60	0.32740	0.00370	0.04439	0.00060	0.59847	287.6	2.8	280.0	3.7	358	24	280.0	3.7	2.6	Single Age
12WPY08_81	2950.00	101.00	0.30670	0.00300	0.04182	0.00032	0.29931	271.2	2.2	264.1	2.0	322	15	264.1	2.0	2.6	Single Age
12WPY08_82	1568.00	157.00	0.34330	0.00370	0.04581	0.00034	0.56254	299.6	2.8	288.8	2.1	386	17	288.8	2.1	3.6	Single Age
12WPY08_84	1315.00	99.10	0.31990	0.00310	0.04402	0.00043	0.76517	282.1	2.5	277.7	2.7	333	17	277.7	2.7	1.6	Single Age
12WPY08_87	2202.00	198.00	0.32240	0.00340	0.04393	0.00048	0.52753	283.7	2.6	277.1	3.0	350	25	277.1	3.0	2.3	Single Age
12WPY08_88	1290.00	102.00	0.33090	0.00660	0.04410	0.00062	0.78963	290.1	5.0	278.2	3.8	356	23	278.2	3.8	4.1	Single Age
12WPY08_89	1537.00	71.80	0.37860	0.00930	0.04460	0.00057	0.48636	325.5	6.8	281.8	3.4	674	48	DISC	DISC	13.4	Single Age
12WPY08_90	1431.00	132.00	0.33740	0.00440	0.04467	0.00061	0.71989	295.1	3.4	281.7	3.8	391	20	281.7	3.8	4.5	Single Age
12WPY08_91	1670.00	41.40	0.36500	0.01400	0.04343	0.00055	0.66480	312.7	9.1	274.1	3.4	596	55	DISC	DISC	12.3	Single Age
12WPY08_92	1650.00	118.20	0.31220	0.00230	0.04294	0.00035	0.58323	275.8	1.8	271.0	2.2	314	16	271.0	2.2	1.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY08_93	2170.00	41.30	0.39460	0.00960	0.04292	0.00054	0.30153	338.0	6.9	270.9	3.3	803	62	DISC	DISC	19.9	Single Age
12WPY08_94	2062.00	39.40	0.36350	0.00580	0.04408	0.00042	0.57710	314.6	4.4	278.1	2.6	592	27	DISC	DISC	11.6	Single Age
12WPY08_95	1523.00	116.00	0.33760	0.00350	0.04465	0.00044	0.43870	295.7	2.6	281.6	2.7	404	24	281.6	2.7	4.8	Single Age
12WPY08_96	2020.00	10.95	0.40310	0.00510	0.04361	0.00031	0.30399	344.2	3.6	275.2	1.9	844	24	DISC	DISC	20.0	Single Age
12WPY08_97	920.00	101.60	0.31590	0.00500	0.04304	0.00062	0.67692	278.6	3.8	271.6	3.8	333	26	271.6	3.8	2.5	Single Age
12WPY08_98	1564.00	118.20	0.32230	0.00280	0.04367	0.00038	0.60226	283.6	2.1	275.6	2.3	349	17	275.6	2.3	2.8	Single Age
12WPY08_99	1094.00	25.70	0.42360	0.00840	0.04805	0.00054	0.22389	358.3	6.0	302.5	3.3	756	44	DISC	DISC	15.6	Single Age
12WPY08_100	1979.00	31.50	0.37500	0.00560	0.04383	0.00048	0.51765	323.2	4.1	276.5	2.9	684	28	DISC	DISC	14.4	Single Age
12WPY08_101	143.20	3.17	1.76100	0.01500	0.17210	0.00180	0.46222	1030.8	5.7	1023.3	9.7	1041	20	1023.3	9.7	0.7	Single Age
12WPY08_103	1375.00	49.70	0.32360	0.00310	0.04138	0.00033	0.41679	284.6	2.4	261.4	2.1	496	25	261.4	2.1	8.2	Single Age
12WPY08_104	1880.00	107.00	0.30450	0.00370	0.04057	0.00072	0.47934	269.9	2.8	256.3	4.5	381	33	256.3	4.5	5.0	Single Age
12WPY08_105	1494.00	89.10	0.30180	0.00320	0.04161	0.00037	0.77410	267.8	2.5	262.8	2.3	309	15	262.8	2.3	1.9	Single Age
12WPY08_106	1076.00	54.30	0.33920	0.00330	0.04361	0.00062	0.01667	296.5	2.5	275.1	3.8	467	40	275.1	3.8	7.2	Single Age
12WPY08_107	1277.00	41.70	0.34300	0.00390	0.04379	0.00038	0.25228	299.4	3.0	276.3	2.3	486	27	276.3	2.3	7.7	Single Age
12WPY08_108	1041.00	83.70	0.32240	0.00380	0.04394	0.00053	0.68939	284.0	2.9	277.2	3.3	339	21	277.2	3.3	2.4	Single Age
12WPY08_109	1646.00	8.00	0.35020	0.00350	0.04363	0.00040	0.48188	304.8	2.6	275.3	2.5	544	20	275.3	2.5	9.7	Single Age
12WPY08_110	1700.00	29.30	0.36690	0.00650	0.04370	0.00053	0.52849	317.6	4.8	275.7	3.3	626	33	DISC	DISC	13.2	Single Age
12WPY08_111	2019.00	245.00	0.30560	0.00430	0.04126	0.00088	0.66657	270.7	3.3	260.6	5.4	360	35	260.6	5.4	3.7	Single Age
12WPY08_112	1310.00	15.50	0.35950	0.00990	0.04441	0.00081	0.68966	311.6	7.4	280.1	5.0	567	42	DISC	DISC	10.1	Single Age
12WPY08_113	1839.00	312.00	0.30930	0.00250	0.04242	0.00033	0.56213	273.6	1.9	267.8	2.0	332	16	267.8	2.0	2.1	Single Age
12WPY08_114	2050.00	306.00	0.31400	0.00480	0.04328	0.00071	0.77211	277.2	3.7	273.1	4.4	319	18	273.1	4.4	1.5	Single Age
12WPY08_115	2016.00	208.00	0.34050	0.00350	0.04409	0.00039	0.69381	297.5	2.7	278.2	2.4	473	18	278.2	2.4	6.5	Single Age
12WPY08_116	1292.00	112.90	0.32400	0.00560	0.04445	0.00080	0.85569	284.8	4.3	280.3	4.9	323	23	280.3	4.9	1.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY08_117	851.00	43.20	0.35700	0.00810	0.04815	0.00092	0.92889	310.4	5.9	303.1	5.7	388	18	303.1	5.7	2.4	Single Age
12WPY08_118	1582.00	326.00	0.30820	0.00370	0.04228	0.00049	0.68525	273.2	2.8	266.9	3.0	331	23	266.9	3.0	2.3	Single Age
12WPY08_119	874.00	88.00	0.32840	0.00370	0.04533	0.00056	0.72892	288.3	2.8	285.8	3.4	328	20	285.8	3.4	0.9	Single Age
12WPY08_120	1536.00	3.56	0.35120	0.00390	0.04303	0.00039	0.33429	305.9	2.9	271.6	2.4	585	24	DISC	DISC	11.2	Single Age
12WPY08_121	2160.00	132.40	0.40100	0.00880	0.04367	0.00049	0.58208	342.0	6.4	275.5	3.0	833	36	DISC	DISC	19.4	Single Age
12WPY08_122	1290.00	41.40	0.33180	0.00500	0.04441	0.00069	0.61048	290.9	3.8	280.1	4.3	378	30	280.1	4.3	3.7	Single Age
12WPY08_123	966.00	112.00	0.34450	0.00370	0.04630	0.00048	0.38453	300.5	2.8	291.8	3.0	368	27	291.8	3.0	2.9	Single Age
12WPY08_124	1230.00	52.70	0.33650	0.00540	0.04346	0.00066	0.62102	294.4	4.1	274.3	4.1	464	25	274.3	4.1	6.8	Single Age
12WPY10_1	560.00	23.68	0.34110	0.00730	0.04720	0.00130	0.74046	297.9	5.5	297.3	7.7	300	13	297.3	7.7	0.2	Rim
12WPY10_1	365.00	2.31	0.71500	0.01000	0.08750	0.00110	0.70382	547.3	6.1	540.5	6.5	572	14	540.5	6.5	1.2	Core
12WPY10_2	457.00	0.93	0.71600	0.00990	0.08670	0.00110	0.76035	548.0	5.9	535.7	6.4	588	12	535.7	6.4	2.2	Single Age
12WPY10_3	486.50	21.62	0.32730	0.00490	0.04477	0.00071	0.61779	287.4	3.7	282.3	4.4	314	15	282.3	4.4	1.8	Single Age
12WPY10_4	256.00	27.20	0.40600	0.02300	0.05490	0.00300	0.46179	346.0	17.0	345.0	18.0	350	38	345.0	18.0	0.3	Rim
12WPY10_4	402.00	2.33	0.75140	0.00670	0.08999	0.00064	0.65312	568.9	3.9	555.5	3.8	595.5	8.2	555.5	3.8	2.4	Core
12WPY10_5	335.70	24.09	0.33980	0.00430	0.04775	0.00036	0.41975	296.9	3.3	301.0	2.3	266	15	301.0	2.3	1.4	Single Age
12WPY10_6	473.00	18.30	0.33250	0.00770	0.04581	0.00084	0.73207	291.3	5.8	288.7	5.2	315	24	288.7	5.2	0.9	Rim
12WPY10_6	235.00	1.24	0.52900	0.02600	0.06760	0.00190	0.70521	430.0	17.0	422.0	11.0	480	58	422.0	11.0	1.9	Core
12WPY10_7	509.00	22.10	0.33210	0.00620	0.04639	0.00095	0.55551	291.1	4.7	292.3	5.9	304	19	292.3	5.9	0.4	Rim
12WPY10_7	153.20	0.42	0.89300	0.01300	0.10790	0.00160	0.20913	648.0	7.2	660.4	9.3	636	19	660.4	9.3	1.9	Core
12WPY10_8	372.40	18.22	0.32830	0.00420	0.04548	0.00047	0.56818	288.2	3.2	286.7	2.9	312	15	286.7	2.9	0.5	Single Age
12WPY10_9	402.00	23.90	0.35900	0.01100	0.04891	0.00080	0.54456	311.7	7.9	307.8	4.9	395	40	307.8	4.9	1.3	Rim
12WPY10_9	86.00	3.21	0.86100	0.01600	0.10460	0.00230	0.07973	630.6	8.9	641.0	13.0	609	33	641.0	13.0	1.6	Core
12WPY10_10	331.80	23.42	0.32770	0.00570	0.04467	0.00055	0.25652	287.7	4.3	281.7	3.4	348	22	281.7	3.4	2.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_11	260.60	7.60	0.38690	0.00910	0.05300	0.00110	0.54385	331.9	6.6	332.6	6.6	358	25	332.6	6.6	0.2	Single Age
12WPY10_12	371.60	22.05	0.33940	0.00410	0.04753	0.00046	0.38671	296.7	3.1	299.3	2.8	278	17	299.3	2.8	0.9	Single Age
12WPY10_13	335.00	15.10	0.40200	0.02500	0.05440	0.00290	0.91143	343.0	18.0	341.0	18.0	357	31	341.0	18.0	0.6	Rim
12WPY10_13	400.00	0.66	0.73100	0.01100	0.09030	0.00130	0.72522	557.0	6.4	557.2	7.8	572	12	557.2	7.8	0.0	Core
12WPY10_14	402.00	20.95	0.33620	0.00570	0.04614	0.00061	0.49164	294.2	4.3	290.8	3.7	329	24	290.8	3.7	1.2	Single Age
12WPY10_15	466.80	21.43	0.33410	0.00430	0.04581	0.00045	0.21467	292.6	3.3	288.7	2.8	301	22	288.7	2.8	1.3	Single Age
12WPY10_16	536.00	23.60	0.34400	0.00640	0.04745	0.00098	0.57817	300.1	4.8	298.8	6.0	340	17	298.8	6.0	0.4	Rim
12WPY10_16	184.00	0.99	0.71100	0.02500	0.08650	0.00340	0.79476	545.0	15.0	535.0	20.0	558	27	535.0	20.0	1.8	Core
12WPY10_17	318.90	24.66	0.34430	0.00610	0.04750	0.00063	0.54933	300.3	4.6	299.1	3.9	315	22	299.1	3.9	0.4	Single Age
12WPY10_18	400.00	23.30	0.32320	0.00440	0.04498	0.00045	0.46115	284.3	3.4	283.6	2.8	279	16	283.6	2.8	0.2	Single Age
12WPY10_19	333.00	24.24	0.32960	0.00380	0.04586	0.00044	0.31468	289.2	2.9	289.0	2.7	277	19	289.0	2.7	0.1	Single Age
12WPY10_20	499.00	20.25	0.33650	0.00420	0.04676	0.00050	0.50380	294.4	3.2	294.6	3.1	304	16	294.6	3.1	0.1	Rim
12WPY10_20	154.70	6.14	0.62400	0.02900	0.08020	0.00360	0.61183	492.0	18.0	497.0	21.0	474	68	497.0	21.0	1.0	Core
12WPY10_21	425.90	24.14	0.33670	0.00440	0.04679	0.00061	0.54153	294.6	3.4	294.8	3.8	296	18	294.8	3.8	0.1	Rim
12WPY10_21	201.00	9.10	0.62000	0.01800	0.07650	0.00100	0.47583	490.0	11.0	475.5	6.1	546	18	475.5	6.1	3.0	Core
12WPY10_22	293.50	20.97	0.33070	0.00440	0.04564	0.00038	0.40917	290.0	3.3	287.7	2.4	309	16	287.7	2.4	0.8	Single Age
12WPY10_23	377.90	23.31	0.34520	0.00380	0.04768	0.00031	0.43730	301.0	2.9	300.3	1.9	301	12	300.3	1.9	0.2	Single Age
12WPY10_24	360.00	20.80	0.34560	0.00690	0.04787	0.00099	0.81004	301.2	5.2	301.4	6.1	323	16	301.4	6.1	0.1	Rim
12WPY10_24	169.30	0.75	4.13200	0.08200	0.24320	0.00530	0.68999	1660.0	16.0	1403.0	27.0	2002	17	2002.0	17.0	29.9	Core
12WPY10_25	575.80	20.28	0.33470	0.00560	0.04622	0.00054	0.41468	293.1	4.2	291.3	3.3	337	24	291.3	3.3	0.6	Rim
12WPY10_25	575.00	3.73	0.69300	0.02600	0.08320	0.00270	0.78592	534.0	16.0	515.0	16.0	614	26	515.0	16.0	3.6	Core
12WPY10_26	556.00	52.00	0.34330	0.00710	0.04778	0.00081	0.83024	299.5	5.3	300.8	5.0	297	15	300.8	5.0	0.4	Rim
12WPY10_26	38.60	1.26	1.38100	0.08500	0.14210	0.00610	0.77716	879.0	36.0	869.0	27.0	944	37	869.0	27.0	1.1	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_27	175.50	120.40	0.34960	0.00690	0.04852	0.00076	0.17895	304.2	5.2	305.4	4.7	310	28	305.4	4.7	0.4	Single Age
12WPY10_28	445.00	21.81	0.34180	0.00510	0.04769	0.00065	0.72160	299.1	3.7	300.3	4.0	308	15	300.3	4.0	0.4	Single Age
12WPY10_29	291.00	27.70	0.33080	0.00910	0.04569	0.00093	0.54826	289.9	7.0	288.0	5.8	304	30	288.0	5.8	0.7	Rim
12WPY10_29	649.00	7.46	1.32800	0.03300	0.13490	0.00300	0.75660	858.0	14.0	816.0	17.0	934	36	816.0	17.0	4.9	Core
12WPY10_30	345.00	20.63	0.33890	0.00370	0.04708	0.00044	0.39444	296.6	2.9	296.6	2.7	291	15	296.6	2.7	0.0	Single Age
12WPY10_31	339.00	21.23	0.33620	0.00390	0.04704	0.00042	0.33245	294.2	3.0	296.3	2.6	275	15	296.3	2.6	0.7	Single Age
12WPY10_32	360.00	23.88	0.32390	0.00540	0.04466	0.00045	0.42107	284.8	4.1	281.6	2.8	309	28	281.6	2.8	1.1	Single Age
12WPY10_34	310.50	21.94	0.34030	0.00460	0.04628	0.00048	0.42450	297.3	3.5	291.6	3.0	323	18	291.6	3.0	1.9	Single Age
12WPY10_35	490.00	23.20	0.33400	0.00610	0.04570	0.00120	0.25018	292.6	4.7	287.9	7.2	336	58	287.9	7.2	1.6	Rim
12WPY10_35	155.00	1.35	1.47700	0.02600	0.14950	0.00230	0.64500	921.0	11.0	898.0	13.0	983	15	898.0	13.0	2.5	Core
12WPY10_36	299.30	24.04	0.34050	0.00560	0.04712	0.00074	0.58841	297.4	4.2	296.8	4.5	290	21	296.8	4.5	0.2	Single Age
12WPY10_37	403.30	21.56	0.33330	0.00540	0.04587	0.00038	0.22476	292.0	4.1	289.1	2.3	318	24	289.1	2.3	1.0	Rim
12WPY10_37	418.00	5.72	0.44700	0.01200	0.05830	0.00140	0.66865	375.0	8.8	365.0	8.6	444	34	365.0	8.6	2.7	Core
12WPY10_39	314.00	19.80	0.34900	0.00870	0.04833	0.00085	0.04100	305.5	5.9	304.3	5.2	330	46	304.3	5.2	0.4	Rim
12WPY10_39	99.20	2.02	0.66100	0.02300	0.07800	0.00160	0.57963	518.0	15.0	484.3	9.8	653	39	484.3	9.8	6.5	Core
12WPY10_40	740.00	21.00	0.34820	0.00800	0.04700	0.00110	0.47529	303.2	6.0	295.8	6.7	341	20	295.8	6.7	2.4	Rim
12WPY10_40	264.30	1.44	0.75500	0.01100	0.09100	0.00130	0.53490	570.9	6.6	561.5	7.5	599	15	561.5	7.5	1.6	Core
12WPY10_41	387.00	18.07	0.33880	0.00410	0.04674	0.00041	0.35349	296.1	3.1	294.4	2.5	303	18	294.4	2.5	0.6	Single Age
12WPY10_42	373.00	23.40	0.34270	0.00770	0.04741	0.00088	0.54154	299.1	5.8	298.6	5.4	303	30	298.6	5.4	0.2	Rim
12WPY10_42	494.00	1.74	1.16100	0.02500	0.11870	0.00270	0.87349	782.0	12.0	723.0	16.0	932	16	723.0	16.0	7.5	Core
12WPY10_43	307.00	77.90	0.35920	0.00590	0.04772	0.00074	0.53702	312.7	4.7	300.5	4.5	414	19	300.5	4.5	3.9	Rim
12WPY10_43	251.50	1.16	0.84100	0.01100	0.09980	0.00110	0.53230	619.6	5.8	614.4	6.4	636	16	614.4	6.4	0.8	Core
12WPY10_44	385.00	22.06	0.34680	0.00750	0.04744	0.00088	0.45142	302.2	5.7	298.8	5.4	311	35	298.8	5.4	1.1	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_44	1042.00	5.95	0.60880	0.00680	0.07370	0.00110	0.83485	482.8	4.3	458.2	6.5	611	8.4	458.2	6.5	5.1	Core
12WPY10_45	280.90	24.73	0.34410	0.00550	0.04733	0.00062	0.35581	300.2	4.2	298.1	3.8	305	22	298.1	3.8	0.7	Single Age
12WPY10_46	382.50	24.12	0.32960	0.00530	0.04550	0.00062	0.40414	289.1	4.1	286.8	3.8	302	19	286.8	3.8	0.8	Single Age
12WPY10_47	303.00	21.23	0.32240	0.00500	0.04479	0.00050	0.14482	283.6	3.8	282.5	3.1	312	20	282.5	3.1	0.4	Single Age
12WPY10_48	444.00	20.60	0.33580	0.00480	0.04550	0.00047	0.34253	294.7	3.9	286.8	2.9	336	20	286.8	2.9	2.7	Single Age
12WPY10_49	457.00	19.60	0.33870	0.00770	0.04674	0.00067	0.11210	296.1	5.8	294.4	4.1	324	30	294.4	4.1	0.6	Single Age
12WPY10_50	453.00	27.70	0.39320	0.00910	0.05270	0.00110	0.71700	336.4	6.6	331.0	6.6	370	20	331.0	6.6	1.6	Single Age
12WPY10_51	328.00	1.33	0.83940	0.00950	0.09830	0.00120	0.44951	618.6	5.3	604.3	7.3	670	17	604.3	7.3	2.3	Single Age
12WPY10_52	316.50	25.61	0.35200	0.01300	0.04800	0.00110	0.12759	308.0	11.0	302.1	6.8	376	45	302.1	6.8	1.9	Rim
12WPY10_52	103.00	1.61	1.55600	0.05600	0.16120	0.00280	0.78203	952.0	23.0	963.0	16.0	929	32	963.0	16.0	1.2	Core
12WPY10_53	325.00	24.44	0.32400	0.00740	0.04577	0.00074	0.49990	284.8	5.6	288.5	4.5	272	25	288.5	4.5	1.3	Rim
12WPY10_53	202.00	18.40	0.41300	0.01000	0.05500	0.00110	0.36195	350.9	7.2	345.3	6.7	393	32	345.3	6.7	1.6	Core
12WPY10_54	312.60	19.78	0.34640	0.00520	0.04844	0.00053	0.18162	301.9	3.9	304.9	3.2	310	27	304.9	3.2	1.0	Single Age
12WPY10_55	292.40	22.73	0.34310	0.00590	0.04702	0.00065	0.52732	299.4	4.5	296.2	4.0	327	20	296.2	4.0	1.1	Single Age
12WPY10_56	406.00	21.29	0.35040	0.00610	0.04734	0.00082	0.32472	305.0	4.6	298.2	5.1	338	29	298.2	5.1	2.2	Rim
12WPY10_56	753.00	2.42	0.54880	0.00910	0.06850	0.00110	0.74499	444.1	5.9	427.4	6.5	533	12	427.4	6.5	3.8	Core
12WPY10_57	325.60	21.63	0.33750	0.00400	0.04691	0.00061	0.25043	295.2	3.0	295.5	3.8	281	20	295.5	3.8	0.1	Single Age
12WPY10_58	378.60	20.75	0.32910	0.00570	0.04571	0.00067	0.41171	288.7	4.3	288.1	4.1	299	22	288.1	4.1	0.2	Single Age
12WPY10_59	479.00	2.10	0.65100	0.01100	0.07960	0.00130	0.82492	509.8	6.7	494.8	7.9	565	13	494.8	7.9	2.9	Single Age
12WPY10_60	188.00	13.00	0.38900	0.01400	0.05320	0.00150	0.58391	333.0	10.0	334.1	9.2	317	35	334.1	9.2	0.3	Rim
12WPY10_60	106.70	0.78	0.71600	0.02500	0.08620	0.00250	0.53768	548.0	14.0	533.0	15.0	590	32	533.0	15.0	2.7	Core
12WPY10_61	285.00	1.02	4.14500	0.06400	0.25880	0.00380	0.84353	1662.0	13.0	1486.0	20.0	1889.7	8.6	1889.7	8.6	21.4	Single Age
12WPY10_62	134.80	0.64	1.07700	0.01800	0.12070	0.00190	0.59058	741.2	9.0	735.0	11.0	748	21	735.0	11.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_63	728.00	2.31	0.64430	0.00940	0.07840	0.00100	0.82488	504.8	5.8	486.4	6.1	583	11	486.4	6.1	3.6	Single Age
12WPY10_64	345.00	22.07	0.36350	0.00810	0.05040	0.00110	0.08687	314.8	6.0	317.0	6.7	323	47	317.0	6.7	0.7	Rim
12WPY10_64	207.20	2.21	0.65300	0.01100	0.08160	0.00140	0.30736	510.2	7.0	505.3	8.3	548	16	505.3	8.3	1.0	Core
12WPY10_65	248.00	37.30	0.35200	0.00920	0.04826	0.00075	0.39851	306.1	6.9	303.8	4.6	349	37	303.8	4.6	0.8	Rim
12WPY10_65	65.50	1.14	0.92300	0.02200	0.11030	0.00160	0.37160	665.0	12.0	674.4	9.3	630	28	674.4	9.3	1.4	Core
12WPY10_66	495.00	22.87	0.33700	0.02000	0.04650	0.00110	0.63130	295.0	15.0	293.1	6.6	302	57	293.1	6.6	0.6	Rim
12WPY10_66	137.00	3.63	1.02500	0.02700	0.11470	0.00240	0.72097	716.0	14.0	700.0	14.0	742	33	700.0	14.0	2.2	Core
12WPY10_67	375.00	27.09	0.33850	0.00840	0.04695	0.00090	0.24483	296.0	6.3	295.7	5.6	365	45	295.7	5.6	0.1	Single Age
12WPY10_68	296.00	34.60	0.35130	0.00650	0.04860	0.00082	0.56367	305.6	4.9	305.9	5.1	319	24	305.9	5.1	0.1	Rim
12WPY10_68	126.00	1.38	0.94500	0.02600	0.11270	0.00230	0.13243	675.0	14.0	688.0	13.0	620	43	688.0	13.0	1.9	Core
12WPY10_69	373.00	20.90	0.33750	0.00600	0.04616	0.00063	0.31566	295.2	4.6	290.9	3.9	331	24	290.9	3.9	1.5	Single Age
12WPY10_70	90.00	5.15	1.68100	0.03700	0.17110	0.00280	0.86054	1004.0	14.0	1018.0	15.0	973	17	1018.0	15.0	1.4	Single Age
12WPY10_73	358.00	21.73	0.34700	0.00400	0.04821	0.00041	0.52064	302.8	2.9	303.5	2.5	309	14	303.5	2.5	0.2	Single Age
12WPY10_74	281.00	151.00	0.42700	0.04000	0.05290	0.00520	0.47057	360.0	28.0	332.0	32.0	579	72	332.0	32.0	7.8	Rim
12WPY10_74	112.60	0.73	1.39400	0.01800	0.14960	0.00190	0.53168	886.0	7.6	899.0	11.0	859	12	899.0	11.0	1.5	Core
12WPY10_75	293.00	27.79	0.32590	0.00600	0.04399	0.00066	0.52264	286.3	4.6	277.5	4.1	356	21	277.5	4.1	3.1	Single Age
12WPY10_76	403.00	23.00	0.35000	0.01500	0.04680	0.00130	0.29454	305.0	11.0	295.1	8.2	362	77	295.1	8.2	3.2	Rim
12WPY10_76	750.00	0.70	0.82500	0.01200	0.09540	0.00140	0.71858	610.4	6.5	587.4	8.2	702	13	587.4	8.2	3.8	Core
12WPY10_77	318.00	19.88	0.31640	0.00420	0.04398	0.00041	0.25573	279.5	3.2	277.4	2.5	293	17	277.4	2.5	0.8	Single Age
12WPY10_78	456.90	21.34	0.31790	0.00360	0.04389	0.00037	0.52722	280.2	2.8	276.9	2.3	301	14	276.9	2.3	1.2	Single Age
12WPY10_79	322.80	22.10	0.33570	0.00600	0.04635	0.00051	0.36657	293.8	4.5	292.1	3.1	306	25	292.1	3.1	0.6	Single Age
12WPY10_80	378.00	21.24	0.31470	0.00340	0.04420	0.00037	0.15298	277.8	2.6	279.5	2.3	274	16	279.5	2.3	0.6	Single Age
12WPY10_81	225.70	1.05	0.85400	0.01100	0.10260	0.00110	0.57882	626.6	6.2	629.8	6.3	625	16	629.8	6.3	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_82	663.00	4.24	0.60180	0.00730	0.07455	0.00096	0.73777	478.2	4.6	463.5	5.8	551	15	463.5	5.8	3.1	Single Age
12WPY10_83	405.00	19.90	0.35230	0.00720	0.04909	0.00090	0.37681	306.3	5.4	308.9	5.5	330	29	308.9	5.5	0.8	Rim
12WPY10_83	170.20	9.69	0.50600	0.01600	0.06550	0.00170	0.61026	416.0	10.0	409.0	10.0	448	53	409.0	10.0	1.7	Core
12WPY10_84	223.00	37.90	0.34540	0.00510	0.04655	0.00070	0.37650	301.1	3.8	294.5	4.3	352	19	294.5	4.3	2.2	Single Age
12WPY10_85	740.00	48.00	0.33500	0.01600	0.04540	0.00190	0.81150	293.0	12.0	286.0	12.0	350	25	286.0	12.0	2.4	Rim
12WPY10_85	303.10	1.20	0.77100	0.01300	0.08900	0.00130	0.65298	580.1	7.6	549.8	7.8	716	19	549.8	7.8	5.2	Core
12WPY10_86	197.00	4.52	1.01200	0.02400	0.11200	0.00270	0.71094	709.0	12.0	684.0	16.0	790	22	684.0	16.0	3.5	Single Age
12WPY10_87	345.70	21.10	0.34030	0.00670	0.04760	0.00140	0.34670	297.3	5.1	299.9	8.3	309	36	299.9	8.3	0.9	Rim
12WPY10_87	168.00	0.94	0.75800	0.01500	0.09050	0.00190	0.67965	572.3	8.8	558.0	11.0	608	22	558.0	11.0	2.5	Core
12WPY10_88	488.00	19.60	0.33350	0.00580	0.04573	0.00078	0.55845	292.1	4.4	288.3	4.8	325	15	288.3	4.8	1.3	Single Age
12WPY10_89	363.00	20.98	0.33900	0.00550	0.04766	0.00065	0.22502	296.3	4.2	300.1	4.0	280	27	300.1	4.0	1.3	Rim
12WPY10_89	433.00	31.20	0.48610	0.00760	0.06296	0.00090	0.77832	402.2	5.2	393.6	5.5	456	18	393.6	5.5	2.1	Core
12WPY10_90	314.00	23.89	0.34830	0.00880	0.04805	0.00084	0.47565	303.2	6.6	303.4	5.4	311	33	303.4	5.4	0.1	Single Age
12WPY10_91	321.00	20.89	0.35420	0.00530	0.04893	0.00070	0.06899	307.8	4.0	308.7	4.1	316	26	308.7	4.1	0.3	Rim
12WPY10_91	425.00	7.79	0.52470	0.00960	0.06750	0.00120	0.54153	428.2	6.4	421.1	7.1	456	29	421.1	7.1	1.7	Core
12WPY10_92	308.00	22.21	0.33970	0.00470	0.04684	0.00051	0.03132	296.9	3.6	295.1	3.1	301	27	295.1	3.1	0.6	Single Age
12WPY10_93	352.50	20.31	0.33480	0.00580	0.04678	0.00054	0.39782	293.2	4.4	294.7	3.3	291	26	294.7	3.3	0.5	Single Age
12WPY10_94	384.00	21.75	0.33220	0.00670	0.04586	0.00056	0.03468	291.1	5.1	289.1	3.4	300	22	289.1	3.4	0.7	Rim
12WPY10_94	617.00	5.68	0.72900	0.02400	0.08670	0.00260	0.83673	556.0	14.0	536.0	16.0	624	36	536.0	16.0	3.6	Core
12WPY10_95	334.00	12.66	0.38110	0.00780	0.05123	0.00059	0.73649	328.6	5.6	322.1	3.6	379	19	322.1	3.6	2.0	Single Age
12WPY10_96	427.00	22.53	0.33420	0.00460	0.04700	0.00059	0.42434	292.7	3.5	296.1	3.7	270	21	296.1	3.7	1.2	Rim
12WPY10_96	393.00	0.88	0.58560	0.00790	0.07410	0.00110	0.58421	468.0	5.0	460.7	6.4	524	19	460.7	6.4	1.6	Core
12WPY10_97	389.00	23.89	0.32270	0.00470	0.04503	0.00050	0.13387	283.9	3.6	283.9	3.1	287	22	283.9	3.1	0.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_98	337.90	20.95	0.33180	0.00370	0.04352	0.00045	0.12270	290.9	2.9	274.6	2.8	416	14	274.6	2.8	5.6	Single Age
12WPY10_99	528.00	21.69	0.34440	0.00780	0.04649	0.00084	0.19493	300.4	5.9	292.9	5.2	354	43	292.9	5.2	2.5	Rim
12WPY10_99	211.00	2.05	4.92000	0.29000	0.28600	0.01500	0.98318	1808.0	48.0	1617.0	78.0	2018	13	2018.0	13.0	19.9	Core
12WPY10_100	431.00	25.05	0.33900	0.00440	0.04727	0.00057	0.21971	296.3	3.3	297.8	3.5	286	25	297.8	3.5	0.5	Single Age
12WPY10_101	427.80	23.88	0.33650	0.00400	0.04664	0.00046	0.38999	294.4	3.1	293.9	2.8	295	14	293.9	2.8	0.2	Single Age
12WPY10_102	338.00	45.00	0.35680	0.00990	0.04850	0.00140	0.54425	309.7	7.4	305.5	8.5	300	34	305.5	8.5	1.4	Rim
12WPY10_102	646.00	1.60	0.57420	0.00850	0.07120	0.00100	0.64728	460.6	5.5	443.6	6.2	538	14	443.6	6.2	3.7	Core
12WPY10_103	429.00	24.60	0.34050	0.00750	0.04744	0.00078	0.46659	297.5	5.7	298.7	4.8	286	29	298.7	4.8	0.4	Rim
12WPY10_103	101.20	1.27	5.28300	0.06400	0.26860	0.00400	0.66074	1869.0	11.0	1533.0	20.0	2266	14	DISC	DISC	32.3	Core
12WPY10_104	308.00	19.37	0.34080	0.00430	0.04727	0.00040	0.23483	297.7	3.2	297.7	2.5	298	19	297.7	2.5	0.0	Single Age
12WPY10_105	494.10	15.56	0.57000	0.01100	0.06768	0.00086	0.71845	458.2	6.8	422.1	5.2	649	17	422.1	5.2	7.9	Single Age
12WPY10_106	443.00	22.89	0.33490	0.00880	0.04550	0.00150	0.52432	293.3	6.7	286.9	9.5	367	29	286.9	9.5	2.2	Rim
12WPY10_106	120.00	0.90	0.89900	0.01600	0.10650	0.00170	0.74715	651.8	9.0	652.0	10.0	654	17	652.0	10.0	0.0	Core
12WPY10_107	165.80	0.80	0.88900	0.01700	0.10450	0.00110	0.66662	645.3	9.2	640.8	6.5	662	17	640.8	6.5	0.7	Single Age
12WPY10_108	619.00	20.10	2.49900	0.03000	0.16330	0.00200	0.83045	1271.3	8.7	975.0	11.0	1829.8	8.3	DISC	DISC	23.3	Single Age
12WPY10_109	373.00	23.27	0.33130	0.00570	0.04651	0.00081	0.15710	290.5	4.3	293.1	5.0	258	32	293.1	5.0	0.9	Single Age
12WPY10_110	382.00	20.19	0.32220	0.00600	0.04512	0.00049	0.28997	283.5	4.6	284.5	3.0	276	25	284.5	3.0	0.4	Rim
12WPY10_110	402.90	3.23	0.67800	0.02200	0.08320	0.00200	0.61604	526.0	13.0	515.0	12.0	586	24	515.0	12.0	2.1	Core
12WPY10_111	425.00	20.53	0.32140	0.00350	0.04507	0.00038	0.17900	283.3	2.6	284.2	2.4	292	16	284.2	2.4	0.3	Single Age
12WPY10_113	335.00	20.90	0.34300	0.01200	0.04740	0.00130	0.34797	299.6	9.0	298.7	8.3	312	44	298.7	8.3	0.3	Rim
12WPY10_113	155.50	3.14	0.62200	0.01500	0.07700	0.00150	0.73973	490.5	9.6	478.3	8.9	582	25	478.3	8.9	2.5	Core
12WPY10_114	465.00	25.05	0.34100	0.01200	0.04650	0.00140	0.34793	297.9	9.4	293.2	8.7	352	31	293.2	8.7	1.6	Rim
12WPY10_114	331.00	7.30	0.45200	0.00530	0.05773	0.00079	0.33830	378.6	3.7	361.8	4.8	502	18	361.8	4.8	4.4	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY10_115	339.30	11.94	0.50300	0.03100	0.05830	0.00260	0.77972	414.0	21.0	365.0	16.0	712	68	DISC	DISC	11.8	Rim
12WPY10_115	19.32	1.44	5.94000	0.13000	0.35400	0.00680	0.38535	1966.0	19.0	1953.0	33.0	1975	27	1975.0	27.0	1.1	Core
12WPY10_116	542.00	11.40	0.35620	0.00710	0.04860	0.00150	0.64076	309.3	5.3	306.2	9.1	348	30	306.2	9.1	1.0	Single Age
12WPY10_117	661.00	3.16	0.58100	0.01000	0.07157	0.00072	0.53218	464.8	6.6	445.6	4.3	569	20	445.6	4.3	4.1	Rim
12WPY10_117	229.00	1.25	0.90300	0.02600	0.11120	0.00160	0.56900	653.0	14.0	679.6	9.5	578	25	679.6	9.5	4.1	Core
12WPY10_118	378.90	21.80	0.35200	0.03000	0.04860	0.00190	0.27815	306.0	22.0	306.0	12.0	340	140	306.0	12.0	0.0	Rim
12WPY10_118	221.00	3.96	0.52400	0.00860	0.06620	0.00120	0.35346	427.7	5.7	413.3	7.4	513	27	413.3	7.4	3.4	Rim
12WPY10_118	76.76	0.35	1.05600	0.02800	0.11810	0.00200	0.16378	731.0	14.0	720.0	12.0	769	41	720.0	12.0	1.5	Core
12WPY10_119	103.00	0.96	15.89000	0.27000	0.56180	0.00970	0.91002	2869.0	16.0	2873.0	40.0	2863.5	7.1	2863.5	7.1	0.3	Single Age
12WPY10_120	243.00	33.50	0.36000	0.01500	0.05000	0.00140	0.33259	312.0	11.0	314.8	8.5	430	100	314.8	8.5	0.9	Rim
12WPY10_120	316.40	2.52	0.74000	0.01700	0.09010	0.00180	0.72465	562.0	10.0	556.0	10.0	587	19	556.0	10.0	1.1	Core
12WPY10_121	345.60	20.79	0.32890	0.00900	0.04618	0.00065	0.30528	289.8	6.6	291.0	4.0	293	36	291.0	4.0	0.4	Rim
12WPY10_121	464.00	0.95	0.62100	0.01800	0.07520	0.00170	0.78335	490.0	11.0	467.0	10.0	585	21	467.0	10.0	4.7	Core
12WPY10_122	501.00	17.35	0.32890	0.00440	0.04549	0.00055	0.66183	288.7	3.4	286.8	3.4	324	15	286.8	3.4	0.7	Rim
12WPY10_122	472.00	1.49	0.65100	0.01300	0.07974	0.00091	0.14859	508.9	8.0	494.6	5.4	579	32	494.6	5.4	2.8	Core
12WPY10_123	342.00	22.91	0.33600	0.01000	0.04733	0.00064	0.09638	295.5	7.3	298.1	3.9	273	31	298.1	3.9	0.9	Rim
12WPY10_123	486.00	9.16	0.61600	0.01100	0.07520	0.00110	0.59577	487.4	7.2	467.3	6.9	574	20	467.3	6.9	4.1	Core
12WPY10_124	320.00	18.65	0.33360	0.00390	0.04645	0.00041	0.19203	293.0	3.0	292.7	2.5	305	19	292.7	2.5	0.1	Single Age
12WPY10_125	346.70	20.24	0.32470	0.00400	0.04517	0.00047	0.31438	285.8	3.1	284.8	2.9	316	16	284.8	2.9	0.3	Single Age
12WPY10_126	350.00	21.96	0.33890	0.00560	0.04632	0.00086	0.41566	296.2	4.3	291.9	5.3	329	23	291.9	5.3	1.5	Rim
12WPY10_126	340.30	1.70	0.62400	0.01100	0.07810	0.00110	0.56816	492.1	6.8	486.0	7.0	525	18	486.0	7.0	1.2	Core
12WPY11_1	750.00	1.77	0.75700	0.03600	0.08370	0.00340	0.94100	573.0	21.0	518.0	20.0	793	21	518.0	20.0	9.6	Single Age
12WPY11_2	538.00	21.20	0.36020	0.00600	0.04814	0.00093	0.65212	312.9	4.6	303.0	5.7	397	25	303.0	5.7	3.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY11_3	1120.00	85.00	0.30370	0.00840	0.04030	0.00120	0.73722	269.2	6.6	254.9	7.7	409	40	254.9	7.7	5.3	Rim
12WPY11_3	215.00	1.71	5.02000	0.14000	0.24900	0.01100	0.75041	1821.0	24.0	1431.0	57.0	2304	8.8	DISC	DISC	37.9	Core
12WPY11_4	403.00	4.76	1.05600	0.03300	0.11670	0.00290	0.77400	731.0	16.0	711.0	17.0	817	21	711.0	17.0	2.7	Single Age
12WPY11_5	493.00	5.83	0.45700	0.02000	0.05970	0.00240	0.95045	380.0	14.0	374.0	15.0	424	18	374.0	15.0	1.6	Single Age
12WPY11_6	1470.00	44.10	0.36300	0.01500	0.04488	0.00097	0.77586	314.0	11.0	283.0	6.0	560	63	283.0	6.0	9.9	Rim
12WPY11_6	419.00	5.73	3.75000	0.16000	0.21010	0.00630	0.66262	1580.0	34.0	1229.0	33.0	2075	55	DISC	DISC	40.8	Core
12WPY11_7	679.00	13.70	0.65200	0.02000	0.07940	0.00230	0.88700	511.0	12.0	492.0	14.0	589	17	492.0	14.0	3.7	Single Age
12WPY11_8	59.70	1.87	1.17800	0.02000	0.12970	0.00260	0.71484	791.0	9.5	786.0	15.0	783	18	786.0	15.0	0.6	Single Age
12WPY11_9	325.00	8.16	0.49100	0.01900	0.05590	0.00130	0.80208	404.0	13.0	350.8	8.0	729	43	DISC	DISC	13.2	Single Age
12WPY11_10	575.00	4.64	4.14000	0.12000	0.21980	0.00670	0.95261	1658.0	24.0	1280.0	35.0	2158	13	DISC	DISC	40.7	Single Age
12WPY11_11	519.00	14.40	0.33230	0.00600	0.04562	0.00078	0.66508	292.3	4.6	288.2	4.7	346	17	288.2	4.7	1.4	Single Age
12WPY11_12	820.00	60.80	0.30510	0.00650	0.04280	0.00110	0.69108	270.3	5.1	270.0	6.5	309	35	270.0	6.5	0.1	Rim
12WPY11_12	59.50	1.06	1.34100	0.05100	0.14260	0.00470	0.73313	862.0	22.0	859.0	27.0	885	38	859.0	27.0	0.3	Core
12WPY11_13	183.00	3.60	0.94200	0.05200	0.11050	0.00560	0.97305	667.0	28.0	674.0	33.0	651	22	674.0	33.0	1.0	Single Age
12WPY11_14	472.00	2.11	0.47250	0.00660	0.06111	0.00098	0.49611	392.8	4.6	382.3	6.0	458	19	382.3	6.0	2.7	Single Age
12WPY11_18	318.10	4.60	4.82000	0.15000	0.16080	0.00490	0.85483	1785.0	26.0	961.0	27.0	2972	18	DISC	DISC	46.2	Single Age
12WPY11_20	361.00	5.80	0.38570	0.00810	0.05230	0.00100	0.68541	331.0	5.9	328.7	6.3	360	20	328.7	6.3	0.7	Single Age
12WPY11_21	800.00	46.90	0.38400	0.01200	0.04230	0.00140	0.15152	329.7	8.5	267.3	8.6	815	91	DISC	DISC	18.9	Rim
12WPY11_21	540.00	4.71	2.21000	0.11000	0.11590	0.00430	0.92463	1182.0	33.0	706.0	25.0	2198	35	DISC	DISC	40.3	Core
12WPY11_22	916.00	18.50	0.38700	0.01100	0.05140	0.00150	0.50497	332.3	8.0	323.2	9.2	382	34	323.2	9.2	2.7	Rim
12WPY11_22	259.70	1.15	0.79300	0.01300	0.09410	0.00220	0.64275	592.6	7.3	580.0	13.0	641	20	580.0	13.0	2.1	Core
12WPY11_23	592.00	1.66	0.52700	0.02400	0.06750	0.00300	0.95426	430.0	16.0	421.0	18.0	492	16	421.0	18.0	2.1	Single Age
12WPY11_24	850.00	16.90	3.16000	0.12000	0.19090	0.00480	0.78911	1445.0	30.0	1131.0	28.0	1970	30	DISC	DISC	21.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY11_25	821.00	5.41	0.49000	0.03800	0.05010	0.00200	0.95560	406.0	26.0	315.0	12.0	892	81	DISC	DISC	22.4	Single Age
12WPY11_26	495.00	109.00	0.39200	0.02800	0.04860	0.00140	0.47333	335.0	20.0	306.1	8.7	460	99	306.1	8.7	8.6	Rim
12WPY11_26	177.70	1.39	9.21000	0.17000	0.41200	0.00910	0.78853	2358.0	17.0	2223.0	41.0	2484	13	2484.0	13.0	10.5	Core
12WPY11_27	288.00	66.70	0.35000	0.01400	0.04800	0.00140	0.81094	306.0	11.0	302.3	8.7	312	31	302.3	8.7	1.2	Rim
12WPY11_27	563.00	1.01	1.40700	0.02700	0.14530	0.00310	0.60483	891.0	11.0	874.0	18.0	947	18	874.0	18.0	1.9	Core
12WPY11_28	706.00	7.83	0.75600	0.01400	0.08630	0.00190	0.78400	571.5	8.3	533.0	11.0	709	19	533.0	11.0	6.7	Single Age
12WPY11_29	419.00	2.26	0.48970	0.00940	0.06420	0.00150	0.78303	404.5	6.4	401.1	8.8	424	16	401.1	8.8	0.8	Single Age
12WPY11_30	157.00	0.94	0.73600	0.01500	0.09000	0.00160	0.44151	559.5	8.8	555.3	9.8	575	34	555.3	9.8	0.8	Single Age
12WPY11_32	208.50	3.35	0.43660	0.00970	0.05630	0.00120	0.12994	367.6	6.8	353.1	7.1	439	29	353.1	7.1	3.9	Single Age
12WPY11_33	582.00	29.00	0.37410	0.00840	0.05010	0.00120	0.63717	322.5	6.2	314.9	7.5	391	26	314.9	7.5	2.4	Single Age
12WPY11_34	384.00	0.77	1.05100	0.01800	0.11870	0.00290	0.68562	728.8	9.0	723.0	17.0	755	23	723.0	17.0	0.8	Single Age
12WPY11_35	489.00	2.19	0.54460	0.00950	0.06610	0.00120	0.58462	441.3	6.3	412.5	7.3	578	22	412.5	7.3	6.5	Single Age
12WPY11_36	870.00	75.00	0.30820	0.00600	0.04273	0.00089	0.19178	272.7	4.6	269.7	5.5	309	31	269.7	5.5	1.1	Rim
12WPY11_36	217.90	0.88	1.01000	0.02200	0.11660	0.00240	0.58959	709.0	11.0	711.0	14.0	687	26	711.0	14.0	0.3	Core
12WPY11_38	961.00	32.00	0.35100	0.00830	0.04700	0.00140	0.62285	305.3	6.2	296.2	8.7	385	29	296.2	8.7	3.0	Single Age
12WPY11_39	470.00	24.80	0.43000	0.03000	0.05530	0.00310	0.95863	360.0	21.0	347.0	19.0	440	42	347.0	19.0	3.6	Single Age
12WPY11_40	760.00	3.47	0.50500	0.02800	0.06390	0.00310	0.96029	412.0	19.0	399.0	19.0	492	24	399.0	19.0	3.2	Single Age
12WPY11_41	406.00	20.00	0.80000	0.03000	0.09010	0.00340	0.84712	598.0	18.0	556.0	20.0	731	29	556.0	20.0	7.0	Single Age
12WPY11_42	511.70	0.87	0.53900	0.01300	0.06790	0.00150	0.76375	438.5	8.1	423.5	9.0	524	21	423.5	9.0	3.4	Single Age
12WPY11_43	683.00	15.10	0.35400	0.01700	0.04580	0.00160	0.68096	307.0	12.0	288.6	9.8	431	40	288.6	9.8	6.0	Single Age
12WPY11_44	457.00	6.60	0.53200	0.03100	0.06400	0.00310	0.95508	430.0	20.0	400.0	19.0	579	25	400.0	19.0	7.0	Single Age
12WPY11_45	630.00	95.00	0.32630	0.00790	0.04400	0.00100	0.78094	286.5	6.0	277.7	6.4	352	26	277.7	6.4	3.1	Single Age
12WPY11_46	548.00	40.70	0.33870	0.00450	0.04637	0.00068	0.60174	296.6	3.4	292.2	4.2	318	15	292.2	4.2	1.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY11_47	326.00	3.27	0.68600	0.01400	0.08330	0.00200	0.54274	529.9	8.4	516.0	12.0	605	20	516.0	12.0	2.6	Single Age
12WPY11_48	269.00	0.54	0.89100	0.01700	0.10730	0.00200	0.66537	646.5	9.3	657.0	12.0	636	18	657.0	12.0	1.6	Single Age
12WPY11_49	1309.00	14.64	2.00400	0.06600	0.12200	0.00430	0.72928	1115.0	22.0	742.0	25.0	1939	23	DISC	DISC	33.5	Single Age
12WPY11_50	581.00	7.18	0.59800	0.01600	0.07460	0.00220	0.85122	476.0	10.0	464.0	13.0	543	18	464.0	13.0	2.5	Single Age
12WPY11_51	1142.00	15.40	0.39440	0.00750	0.05090	0.00087	0.81237	337.4	5.5	320.0	5.3	472	20	320.0	5.3	5.2	Single Age
12WPY11_52	648.00	3.22	0.49500	0.01600	0.06380	0.00180	0.93024	407.0	11.0	398.0	11.0	458	20	398.0	11.0	2.2	Single Age
12WPY11_53	608.00	5.87	2.40900	0.06800	0.15030	0.00350	0.80840	1246.0	20.0	903.0	20.0	1905	18	DISC	DISC	27.5	Single Age
12WPY11_54	517.00	85.00	0.33610	0.00710	0.04540	0.00100	0.75934	294.0	5.4	286.4	6.3	345	24	286.4	6.3	2.6	Single Age
12WPY11_55	289.90	1.91	0.75800	0.01600	0.09120	0.00180	0.81296	573.9	9.0	564.0	11.0	603	15	564.0	11.0	1.7	Single Age
12WPY11_56	367.00	120.00	0.33800	0.02500	0.04250	0.00140	0.60886	294.0	18.0	268.1	8.6	475	92	268.1	8.6	8.8	Single Age
12WPY11_57	785.00	0.96	0.86200	0.02900	0.09920	0.00310	0.90882	630.0	15.0	609.0	18.0	682	19	609.0	18.0	3.3	Single Age
12WPY11_58	474.00	37.40	0.39800	0.01400	0.05200	0.00140	0.89395	340.0	10.0	326.9	8.9	416	22	326.9	8.9	3.9	Single Age
12WPY11_61	340.00	57.20	0.30500	0.01600	0.03960	0.00180	0.50843	270.0	12.0	250.0	11.0	447	76	250.0	11.0	7.4	Rim
12WPY11_61	681.00	2.69	7.34000	0.19000	0.33370	0.00700	0.73333	2161.0	23.0	1856.0	34.0	2457	21	2457.0	21.0	24.5	Core
12WPY11_62	452.00	11.60	0.41100	0.01900	0.04770	0.00130	0.83876	349.0	14.0	300.3	8.1	642	62	DISC	DISC	14.0	Single Age
12WPY11_63	501.00	1.60	0.59400	0.01100	0.07370	0.00140	0.77751	474.2	6.9	458.1	8.6	542	13	458.1	8.6	3.4	Single Age
12WPY11_64	598.00	24.50	0.37500	0.00890	0.05024	0.00095	0.67375	323.9	6.7	316.0	5.8	395	26	316.0	5.8	2.4	Single Age
12WPY11_65	62.10	0.86	4.18000	0.11000	0.27600	0.00580	0.79046	1679.0	21.0	1570.0	29.0	1830	15	1830.0	15.0	14.2	Single Age
12WPY11_66	360.00	1.62	5.30000	0.38000	0.25200	0.01600	0.97222	1839.0	64.0	1439.0	82.0	2372	23	DISC	DISC	39.3	Single Age
12WPY11_67	430.00	46.20	0.34400	0.01200	0.04730	0.00110	0.57989	300.2	9.2	298.0	6.8	333	54	298.0	6.8	0.7	Single Age
12WPY11_68	389.00	11.00	0.43700	0.03400	0.05400	0.00310	0.95229	366.0	24.0	339.0	19.0	516	44	339.0	19.0	7.4	Single Age
12WPY11_69	754.00	1.86	0.43500	0.01000	0.05490	0.00130	0.82797	366.4	7.3	344.6	7.9	510	19	344.6	7.9	5.9	Single Age
12WPY11_70	371.00	12.10	0.35030	0.00800	0.04560	0.00110	0.80067	306.0	6.0	287.7	6.5	441	18	287.7	6.5	6.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY11_71	200.00	1.22	0.69800	0.03000	0.08770	0.00280	0.92833	538.0	18.0	541.0	16.0	531	27	541.0	16.0	0.6	Single Age
12WPY11_72	543.00	28.90	0.34500	0.00670	0.04647	0.00083	0.85481	300.8	5.1	292.8	5.1	369	13	292.8	5.1	2.7	Single Age
12WPY11_73	404.00	77.00	0.35940	0.00950	0.04860	0.00110	0.68501	311.6	7.1	306.0	6.8	326	26	306.0	6.8	1.8	Single Age
12WPY11_74	580.00	40.20	0.44300	0.03600	0.05710	0.00340	0.94893	370.0	25.0	358.0	20.0	457	59	358.0	20.0	3.2	Single Age
12WPY11_75	291.00	8.60	0.52900	0.03500	0.06540	0.00360	0.95783	426.0	23.0	407.0	22.0	512	30	407.0	22.0	4.5	Single Age
12WPY11_76	650.00	11.30	0.49700	0.01900	0.06020	0.00190	0.85558	409.0	13.0	377.0	11.0	572	30	377.0	11.0	7.8	Rim
12WPY11_76	200.20	1.75	1.10200	0.02300	0.11940	0.00290	0.62601	754.0	11.0	727.0	17.0	884	26	727.0	17.0	3.6	Core
12WPY11_77	259.00	2.04	1.30000	0.02200	0.13660	0.00270	0.64469	845.4	9.8	825.0	15.0	899	21	825.0	15.0	2.4	Single Age
12WPY11_78	633.00	30.00	0.32660	0.00650	0.04432	0.00079	0.64207	286.7	5.0	279.5	4.9	367	25	279.5	4.9	2.5	Single Age
12WPY11_79	408.00	35.20	0.42600	0.02200	0.05660	0.00250	0.95591	358.0	15.0	355.0	15.0	386	22	355.0	15.0	0.8	Single Age
12WPY11_80	282.00	1.09	1.40600	0.03300	0.14190	0.00370	0.56783	891.0	14.0	855.0	21.0	967	29	855.0	21.0	4.0	Single Age
12WPY11_81	493.00	65.00	0.36500	0.02700	0.04970	0.00270	0.93139	315.0	19.0	312.0	17.0	391	61	312.0	17.0	1.0	Rim
12WPY11_81	129.80	1.67	1.34000	0.03200	0.14050	0.00320	0.76859	862.0	14.0	847.0	18.0	898	22	847.0	18.0	1.7	Core
12WPY11_82	466.00	3.04	0.84600	0.02800	0.09200	0.00300	0.91708	621.0	15.0	567.0	18.0	836	19	567.0	18.0	8.7	Single Age
12WPY11_83	427.00	18.60	0.55400	0.03900	0.05790	0.00220	0.87141	449.0	26.0	362.0	14.0	913	90	DISC	DISC	19.4	Single Age
12WPY11_84	335.00	2.05	1.22000	0.02400	0.12830	0.00230	0.80203	809.0	11.0	778.0	13.0	893	16	778.0	13.0	3.8	Single Age
12WPY11_85	821.00	1.81	0.74700	0.02000	0.08490	0.00170	0.76875	567.0	11.0	525.0	10.0	775	20	525.0	10.0	7.4	Single Age
12WPY11_86	666.00	13.20	0.47000	0.02300	0.06070	0.00280	0.96661	388.0	16.0	379.0	17.0	449	18	379.0	17.0	2.3	Single Age
12WPY11_87	928.00	1.51	0.73200	0.02100	0.08640	0.00190	0.84191	556.0	12.0	534.0	11.0	658	18	534.0	11.0	4.0	Single Age
12WPY11_88	461.00	3.31	0.52800	0.02400	0.06770	0.00310	0.90994	430.0	16.0	424.0	19.0	467	25	424.0	19.0	1.4	Single Age
12WPY11_89	373.00	35.70	0.38500	0.01400	0.05230	0.00190	0.81718	330.0	11.0	328.0	12.0	400	35	328.0	12.0	0.6	Single Age
12WPY11_90	423.00	8.00	0.62600	0.03900	0.07770	0.00430	0.97126	487.0	25.0	481.0	26.0	540	29	481.0	26.0	1.2	Single Age
12WPY11_91	282.00	98.50	0.34360	0.00840	0.04580	0.00120	0.43855	299.8	6.3	288.7	7.3	408	42	288.7	7.3	3.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY11_92	204.60	0.53	1.10800	0.02200	0.12420	0.00220	0.78605	756.0	11.0	755.0	13.0	759	15	755.0	13.0	0.1	Single Age
12WPY11_93	570.00	5.69	0.81700	0.02900	0.09220	0.00260	0.88393	605.0	16.0	571.0	16.0	781	23	571.0	16.0	5.6	Single Age
12WPY11_94	479.00	53.00	0.37980	0.00890	0.05190	0.00100	0.79027	326.6	6.5	326.0	6.4	343	23	326.0	6.4	0.2	Single Age
12WPY11_95	536.00	31.20	0.33290	0.00710	0.04450	0.00110	0.51309	291.5	5.4	280.6	6.5	360	27	280.6	6.5	3.7	Single Age
12WPY11_96	241.40	1.48	0.59300	0.01300	0.07400	0.00170	0.73917	473.5	8.3	460.0	10.0	555	19	460.0	10.0	2.9	Single Age
12WPY11_97	573.00	3.04	0.65800	0.02200	0.07710	0.00250	0.85474	512.0	14.0	478.0	15.0	686	18	478.0	15.0	6.6	Single Age
12WPY11_98	554.00	3.54	2.02200	0.06900	0.12810	0.00410	0.89876	1120.0	23.0	782.0	25.0	1864	17	DISC	DISC	30.2	Single Age
12WPY11_99	391.00	14.50	0.45300	0.02400	0.06000	0.00300	0.94826	376.0	17.0	375.0	18.0	417	29	375.0	18.0	0.3	Single Age
12WPY11_100	450.00	0.68	0.56600	0.01300	0.07150	0.00160	0.84265	456.6	8.1	445.3	9.8	497	19	445.3	9.8	2.5	Single Age
12WPY11_101	592.00	2.88	5.52800	0.09700	0.29110	0.00580	0.71006	1904.0	15.0	1647.0	29.0	2200	20	2200.0	20.0	25.1	Single Age
12WPY11_102	340.40	20.97	0.47790	0.00810	0.05857	0.00089	0.60772	397.8	5.5	366.9	5.4	586	16	366.9	5.4	7.8	Single Age
12WPY11_103	257.70	2.22	2.29200	0.06500	0.16910	0.00390	0.71118	1209.0	20.0	1007.0	22.0	1579	29	DISC	DISC	16.7	Single Age
12WPY11_104	608.00	11.41	0.36900	0.01300	0.04830	0.00120	0.55937	318.2	9.5	304.0	7.6	433	24	304.0	7.6	4.5	Single Age
12WPY11_105	1314.00	2.07	0.58090	0.00890	0.07210	0.00130	0.75064	465.7	5.5	448.5	7.7	549	16	448.5	7.7	3.7	Single Age
12WPY11_106	610.00	2.43	0.44900	0.01000	0.05740	0.00130	0.83565	376.6	7.1	361.1	8.0	479	18	361.1	8.0	4.1	Single Age
12WPY11_107	428.00	8.30	0.47600	0.02400	0.06050	0.00240	0.80014	393.0	16.0	378.0	15.0	450	36	378.0	15.0	3.8	Single Age
12WPY11_108	143.40	0.97	0.64600	0.02000	0.07760	0.00190	0.71450	506.0	12.0	482.0	11.0	622	22	482.0	11.0	4.7	Single Age
12WPY11_109	481.00	5.89	0.42900	0.01200	0.05490	0.00150	0.87190	363.1	8.6	344.2	9.1	480	17	344.2	9.1	5.2	Single Age
12WPY11_110	241.90	0.49	1.03900	0.02900	0.11340	0.00290	0.67623	725.0	14.0	692.0	17.0	829	22	692.0	17.0	4.6	Single Age
12WPY11_111	1579.00	1.27	0.68800	0.01400	0.08360	0.00200	0.76214	531.2	8.6	517.0	12.0	609	24	517.0	12.0	2.7	Single Age
12WPY11_112	325.00	53.00	0.35000	0.01200	0.04730	0.00140	0.56762	304.3	9.3	297.6	8.9	339	36	297.6	8.9	2.2	Rim
12WPY11_112	228.20	1.33	5.57000	0.12000	0.26210	0.00720	0.81884	1911.0	19.0	1500.0	37.0	2395	19	DISC	DISC	37.4	Core
12WPY11_113	339.00	73.90	0.36200	0.01500	0.04900	0.00250	0.36419	313.0	11.0	308.0	15.0	315	54	308.0	15.0	1.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY11_114	539.00	20.00	0.36600	0.01900	0.04740	0.00200	0.87785	316.0	14.0	298.0	13.0	467	32	298.0	13.0	5.7	Single Age
12WPY11_115	514.00	29.20	0.35160	0.00590	0.04882	0.00079	0.56072	305.8	4.4	307.3	4.9	307	20	307.3	4.9	0.5	Single Age
12WPY11_116	100.30	0.94	0.64700	0.02000	0.08300	0.00220	0.73680	507.0	12.0	514.0	13.0	493	30	514.0	13.0	1.4	Single Age
12WPY11_117	600.00	8.40	0.42900	0.01200	0.05610	0.00160	0.89564	361.8	8.9	352.0	10.0	421	17	352.0	10.0	2.7	Single Age
12WPY11_118	768.00	31.00	0.36300	0.01400	0.04820	0.00130	0.86000	314.0	10.0	303.7	8.3	391	32	303.7	8.3	3.3	Single Age
12WPY11_119	493.00	36.00	0.51900	0.08300	0.05080	0.00400	0.95123	412.0	54.0	319.0	24.0	910	180	DISC	DISC	22.6	Rim
12WPY11_119	348.00	2.57	3.45900	0.08800	0.17510	0.00380	0.71086	1517.0	20.0	1040.0	21.0	2249	18	DISC	DISC	31.4	Core
12WPY11_120	1032.00	41.30	0.36400	0.00940	0.04970	0.00160	0.77879	315.1	7.0	312.7	9.7	343	37	312.7	9.7	0.8	Rim
12WPY11_120	151.80	0.67	0.83200	0.01900	0.10050	0.00200	0.65357	614.0	11.0	617.0	12.0	624	18	617.0	12.0	0.5	Core
12WPY11_121	327.00	19.30	0.50000	0.03300	0.06400	0.00360	0.96101	407.0	22.0	399.0	22.0	451	32	399.0	22.0	2.0	Single Age
12WPY11_122	362.00	9.27	0.47330	0.00830	0.06010	0.00110	0.76536	393.2	5.7	376.2	7.0	506	16	376.2	7.0	4.3	Single Age
12WPY11_123	372.00	3.88	0.90500	0.07700	0.10330	0.00790	0.97753	637.0	42.0	630.0	46.0	706	31	630.0	46.0	1.1	Single Age
12WPY11_124	200.10	0.51	7.75000	0.17000	0.36280	0.00940	0.78147	2204.0	19.0	1994.0	45.0	2415	16	2415.0	16.0	17.4	Single Age
12WPY11_125	408.00	8.80	0.40600	0.01900	0.05360	0.00200	0.94846	344.0	13.0	337.0	12.0	416	28	337.0	12.0	2.0	Single Age
12WPY11_126	415.00	3.13	0.56600	0.02200	0.07120	0.00250	0.92947	456.0	14.0	443.0	15.0	538	19	443.0	15.0	2.9	Single Age
12WPY11_127	1017.00	10.47	0.95400	0.01600	0.10280	0.00190	0.69225	679.5	8.2	631.0	11.0	849	17	631.0	11.0	7.1	Single Age
12WPY11_128	439.00	26.30	0.35600	0.01500	0.04710	0.00150	0.88719	309.0	11.0	296.6	9.2	370	32	296.6	9.2	4.0	Single Age
12WPY11_129	889.00	6.90	0.51900	0.03700	0.06460	0.00420	0.98404	418.0	25.0	403.0	25.0	506	26	403.0	25.0	3.6	Single Age
12WPY12_1	478.00	28.70	0.42600	0.02900	0.05730	0.00350	0.97883	362.0	21.0	361.0	21.0	424	29	361.0	21.0	0.3	Single Age
12WPY12_3	189.00	2.01	4.24700	0.06100	0.28510	0.00410	0.58033	1682.0	12.0	1616.0	21.0	1761	15	1761.0	15.0	8.2	Single Age
12WPY12_4	839.00	6.20	0.51000	0.02800	0.06410	0.00300	0.97771	415.0	19.0	400.0	18.0	509	22	400.0	18.0	3.6	Single Age
12WPY12_5	236.50	0.79	0.85500	0.01500	0.10100	0.00200	0.62666	626.7	8.0	620.0	12.0	650	23	620.0	12.0	1.1	Single Age
12WPY12_6	308.00	2.64	1.37400	0.04300	0.14030	0.00410	0.87427	880.0	19.0	846.0	23.0	971	22	846.0	23.0	3.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY12_7	359.00	4.66	0.65200	0.01600	0.07600	0.00210	0.72832	509.1	9.6	472.0	13.0	709	28	472.0	13.0	7.3	Single Age
12WPY12_8	621.00	1.86	5.87900	0.07500	0.32970	0.00540	0.56666	1957.0	11.0	1845.0	24.0	2086	16	2086.0	16.0	11.6	Single Age
12WPY12_9	409.00	3.12	3.69000	0.11000	0.25920	0.00700	0.86637	1567.0	24.0	1485.0	36.0	1695	19	1695.0	19.0	12.4	Single Age
12WPY12_10	152.00	1.56	1.06600	0.02000	0.11890	0.00210	0.62970	738.0	10.0	724.0	12.0	796	24	724.0	12.0	1.9	Single Age
12WPY12_11	261.00	1.48	1.66000	0.03300	0.16100	0.00400	0.68632	992.0	13.0	962.0	22.0	1070	25	962.0	22.0	3.0	Single Age
12WPY12_12	8.05	50.00	5.92000	0.23000	0.07820	0.00310	0.49836	1964.0	33.0	485.0	19.0	4373	31	DISC	DISC	75.3	Single Age
12WPY12_13	100.00	1.83	0.93900	0.06900	0.10710	0.00670	0.96081	663.0	37.0	658.0	39.0	711	33	658.0	39.0	0.8	Single Age
12WPY12_14	112.50	1.39	1.03900	0.02700	0.11690	0.00390	0.64413	722.0	13.0	712.0	22.0	752	23	712.0	22.0	1.4	Single Age
12WPY12_15	312.70	2.84	2.64000	0.10000	0.17510	0.00690	0.88557	1311.0	28.0	1040.0	38.0	1787	26	DISC	DISC	20.7	Single Age
12WPY12_16	599.00	5.69	11.22000	0.17000	0.40760	0.00600	0.76055	2540.0	14.0	2203.0	27.0	2815.7	8.8	2815.7	8.8	21.8	Single Age
12WPY12_17	240.00	4.20	0.61000	0.02300	0.07500	0.00270	0.86664	484.0	15.0	466.0	16.0	572	22	466.0	16.0	3.7	Single Age
12WPY12_18	487.00	2.23	4.59000	0.12000	0.28200	0.00770	0.80810	1746.0	22.0	1601.0	39.0	1895	19	1895.0	19.0	15.5	Single Age
12WPY12_19	127.20	1.08	4.24200	0.05600	0.27940	0.00410	0.52430	1683.0	11.0	1590.0	20.0	1796	15	1796.0	15.0	11.5	Single Age
12WPY12_20	346.00	5.16	0.66800	0.02000	0.07690	0.00230	0.87696	518.0	12.0	477.0	14.0	711	20	477.0	14.0	7.9	Single Age
12WPY12_21	225.30	1.78	1.54400	0.02500	0.16110	0.00270	0.75777	947.2	9.8	963.0	15.0	924	13	963.0	15.0	1.7	Single Age
12WPY12_22	324.50	1.88	1.30000	0.03300	0.13310	0.00360	0.72703	845.0	15.0	806.0	21.0	968	28	806.0	21.0	4.6	Single Age
12WPY12_23	394.60	1.10	12.17000	0.18000	0.47280	0.00890	0.58922	2617.0	14.0	2495.0	39.0	2719	20	2719.0	20.0	8.2	Single Age
12WPY12_24	121.00	1.65	1.32300	0.03200	0.13800	0.00390	0.81215	854.0	14.0	832.0	22.0	919	21	832.0	22.0	2.6	Single Age
12WPY12_25	266.00	1.83	0.86000	0.01700	0.10280	0.00190	0.79264	630.9	9.4	630.0	11.0	637	19	630.0	11.0	0.1	Single Age
12WPY12_26	189.00	1.79	2.85800	0.07300	0.20280	0.00490	0.76156	1379.0	20.0	1190.0	26.0	1681	28	DISC	DISC	13.7	Single Age
12WPY12_27	1086.00	9.57	3.16000	0.13000	0.18920	0.00690	0.92261	1452.0	32.0	1115.0	37.0	1957	18	DISC	DISC	23.2	Single Age
12WPY12_28	93.30	1.90	0.89400	0.01800	0.10480	0.00210	0.59334	647.9	9.7	642.0	12.0	651	23	642.0	12.0	0.9	Single Age
12WPY12_29	710.00	5.80	8.76000	0.16000	0.37400	0.00670	0.75834	2311.0	16.0	2047.0	32.0	2555	12	2555.0	12.0	19.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY12_30	381.10	2.92	4.99800	0.08200	0.29830	0.00630	0.78383	1818.0	14.0	1682.0	31.0	1977	12	1977.0	12.0	14.9	Single Age
12WPY12_31	226.60	1.50	0.65900	0.01800	0.07760	0.00200	0.80482	513.0	11.0	482.0	12.0	656	24	482.0	12.0	6.0	Single Age
12WPY12_32	176.80	1.24	1.61000	0.02400	0.15800	0.00320	0.72700	973.5	9.2	945.0	18.0	1037	14	945.0	18.0	2.9	Single Age
12WPY12_33	174.00	3.51	12.57000	0.21000	0.50400	0.01200	0.70139	2646.0	16.0	2633.0	52.0	2664	15	2664.0	15.0	1.2	Single Age
12WPY12_34	81.80	2.02	1.90300	0.03700	0.17930	0.00460	0.64429	1081.0	13.0	1068.0	24.0	1124	21	1068.0	24.0	1.2	Single Age
12WPY12_35	92.10	2.39	0.95100	0.02100	0.10260	0.00240	0.69166	678.0	11.0	629.0	14.0	848	18	629.0	14.0	7.2	Single Age
12WPY12_36	175.00	21.20	0.94800	0.01500	0.10740	0.00160	0.53579	676.3	7.8	657.4	9.6	704	18	657.4	9.6	2.8	Single Age
12WPY12_37	472.00	1.24	1.47200	0.02900	0.14890	0.00300	0.66453	920.0	12.0	898.0	18.0	967	18	898.0	18.0	2.4	Single Age
12WPY12_38	598.00	1.67	0.67000	0.02200	0.08260	0.00250	0.90099	519.0	13.0	513.0	15.0	566	18	513.0	15.0	1.2	Single Age
12WPY12_39	10.70	3.39	1.05700	0.04000	0.11060	0.00350	0.26999	738.0	17.0	676.0	20.0	895	69	676.0	20.0	8.4	Single Age
12WPY12_40	127.70	1.35	0.99600	0.01600	0.11430	0.00150	0.52333	703.0	7.7	697.6	8.8	723	17	697.6	8.8	0.8	Single Age
12WPY12_41	269.00	2.32	1.93600	0.02900	0.16350	0.00280	0.72188	1093.9	9.8	976.0	16.0	1327	14	DISC	DISC	10.8	Single Age
12WPY12_42	797.00	3.46	3.81000	0.12000	0.16870	0.00700	0.74325	1593.0	25.0	1004.0	39.0	2500	28	DISC	DISC	37.0	Single Age
12WPY12_43	201.50	0.91	0.84100	0.01300	0.09930	0.00160	0.11543	619.2	7.0	610.4	9.6	645	17	610.4	9.6	1.4	Single Age
12WPY12_44	316.60	1.36	0.82700	0.01700	0.09870	0.00210	0.77577	612.3	9.4	607.0	12.0	646	20	607.0	12.0	0.9	Single Age
12WPY12_45	199.00	0.91	4.49000	0.07900	0.25970	0.00410	0.67813	1727.0	15.0	1488.0	21.0	2044	16	2044.0	16.0	27.2	Single Age
12WPY12_46	6.73	84.00	5.29000	0.19000	0.07410	0.00340	0.42261	1861.0	31.0	461.0	20.0	4259	35	DISC	DISC	75.2	Single Age
12WPY12_47	123.00	3.06	1.71900	0.03800	0.17250	0.00410	0.21580	1014.0	14.0	1025.0	22.0	993	15	1025.0	22.0	1.1	Single Age
12WPY12_48	841.00	3.62	0.84100	0.01300	0.09840	0.00170	0.67989	619.0	7.0	605.0	10.0	667	15	605.0	10.0	2.3	Single Age
12WPY12_49	103.20	1.52	10.91000	0.18000	0.45000	0.00780	0.66634	2515.0	16.0	2394.0	35.0	2605	16	2605.0	16.0	8.1	Single Age
12WPY12_50	575.00	0.53	2.51200	0.06900	0.16030	0.00320	0.84179	1275.0	20.0	961.0	18.0	1872	18	DISC	DISC	24.6	Single Age
12WPY12_51	632.00	4.40	0.75300	0.04300	0.08830	0.00460	0.97352	570.0	24.0	547.0	27.0	659	14	547.0	27.0	4.0	Single Age
12WPY12_52	50.90	2.01	1.51100	0.04800	0.15570	0.00420	0.78225	938.0	20.0	932.0	24.0	935	27	932.0	24.0	0.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY12_53	537.00	1.04	13.60000	0.23000	0.44180	0.00920	0.75579	2723.0	17.0	2364.0	40.0	2988	12	2988.0	12.0	20.9	Single Age
12WPY12_54	149.30	1.71	2.79000	0.13000	0.20630	0.00840	0.93615	1344.0	35.0	1207.0	45.0	1572	17	1572.0	17.0	23.2	Single Age
12WPY12_55	270.00	0.99	8.45000	0.31000	0.34800	0.01200	0.94461	2282.0	32.0	1919.0	58.0	2591	12	2591.0	12.0	25.9	Single Age
12WPY12_56	1115.00	2.81	0.76800	0.02200	0.08190	0.00190	0.89765	577.0	12.0	507.0	11.0	827	17	DISC	DISC	12.1	Single Age
12WPY12_57	298.00	0.55	0.78100	0.01100	0.09430	0.00180	0.57640	586.7	6.7	581.0	10.0	593	24	581.0	10.0	1.0	Single Age
12WPY12_58	325.00	1.36	0.60500	0.01300	0.07690	0.00160	0.79958	479.7	8.1	477.4	9.4	515	13	477.4	9.4	0.5	Single Age
12WPY12_59	354.00	2.06	0.50500	0.01800	0.06370	0.00180	0.90542	413.0	12.0	398.0	11.0	492	20	398.0	11.0	3.6	Single Age
12WPY12_60	5.53	230.00	8.26000	0.19000	0.10520	0.00340	0.40275	2262.0	21.0	644.0	20.0	4424	30	DISC	DISC	71.5	Single Age
12WPY12_61	211.00	1.19	1.58600	0.02200	0.15890	0.00270	0.65723	965.4	8.6	950.0	15.0	987	14	950.0	15.0	1.6	Single Age
12WPY12_62	575.00	4.16	0.87300	0.02200	0.09820	0.00320	0.75372	636.0	12.0	604.0	19.0	746	23	604.0	19.0	5.0	Single Age
12WPY12_63	234.00	1.20	5.43000	0.11000	0.32330	0.00730	0.73838	1887.0	18.0	1805.0	36.0	1980	19	1980.0	19.0	8.8	Single Age
12WPY12_64	433.00	1.83	2.57800	0.08200	0.13620	0.00340	0.88255	1291.0	23.0	823.0	19.0	2170	19	DISC	DISC	36.3	Single Age
12WPY12_65	139.00	1.36	1.26400	0.01800	0.13840	0.00220	0.54015	830.5	8.3	836.0	12.0	806	18	836.0	12.0	0.7	Single Age
12WPY12_66	123.50	1.73	0.81100	0.01700	0.09590	0.00200	0.59604	603.5	9.3	590.0	12.0	659	25	590.0	12.0	2.2	Single Age
12WPY12_67	60.80	1.49	0.78700	0.02500	0.09460	0.00300	0.64396	588.0	14.0	582.0	17.0	599	42	582.0	17.0	1.0	Single Age
12WPY12_68	89.40	0.73	1.75100	0.02700	0.17020	0.00320	0.48723	1027.0	10.0	1016.0	18.0	1029	21	1016.0	18.0	1.1	Single Age
12WPY12_69	451.00	29.30	0.42700	0.02400	0.04990	0.00160	0.62364	360.0	17.0	314.1	9.8	595	64	DISC	DISC	12.8	Single Age
12WPY12_70	302.40	4.18	0.69600	0.01100	0.08660	0.00120	0.60243	537.0	6.8	535.3	7.0	534	20	535.3	7.0	0.3	Single Age
12WPY12_71	153.60	0.62	1.47900	0.02400	0.14890	0.00310	0.66872	921.1	9.7	894.0	17.0	1012	16	894.0	17.0	2.9	Single Age
12WPY12_72	141.20	1.34	1.33400	0.03000	0.13510	0.00330	0.79852	861.0	13.0	817.0	19.0	979	16	817.0	19.0	5.1	Single Age
12WPY12_73	409.00	6.85	5.50700	0.08100	0.33050	0.00630	0.69765	1900.0	13.0	1840.0	30.0	1959	17	1959.0	17.0	6.1	Single Age
12WPY12_75	36.22	1.50	2.34700	0.05900	0.20130	0.00500	0.07303	1225.0	18.0	1182.0	27.0	1325	36	1182.0	27.0	3.5	Single Age
12WPY12_76	1083.00	1.69	0.59810	0.00780	0.07220	0.00130	0.72190	475.8	5.0	449.5	8.1	600	17	449.5	8.1	5.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY12_77	249.80	0.85	1.70500	0.03800	0.16810	0.00340	0.72822	1014.0	14.0	1004.0	18.0	1027	17	1004.0	18.0	1.0	Single Age
12WPY12_78	164.90	1.75	0.74800	0.01500	0.09010	0.00190	0.57216	566.6	8.6	556.0	11.0	585	23	556.0	11.0	1.9	Single Age
12WPY12_79	255.00	0.73	1.48600	0.02000	0.14620	0.00220	0.71433	926.4	8.0	879.0	12.0	1017	11	879.0	12.0	5.1	Single Age
12WPY12_80	203.00	5.70	1.33700	0.06900	0.14240	0.00610	0.95787	853.0	31.0	861.0	34.0	840	29	861.0	34.0	0.9	Single Age
12WPY12_81	479.00	1.85	1.83900	0.02600	0.17460	0.00270	0.79304	1058.8	9.3	1037.0	15.0	1098	10	1037.0	15.0	2.1	Single Age
12WPY12_82	369.00	1.92	0.76600	0.02000	0.08490	0.00280	0.87724	577.0	12.0	525.0	17.0	793	27	525.0	17.0	9.0	Single Age
12WPY12_83	7.09	8.90	5.17000	0.31000	0.12430	0.00690	0.30821	1842.0	50.0	753.0	39.0	3467	92	DISC	DISC	59.1	Single Age
12WPY12_84	184.00	1.19	8.86000	0.13000	0.35460	0.00640	0.83234	2324.0	13.0	1955.0	30.0	2662	12	2662.0	12.0	26.6	Single Age
12WPY12_85	384.00	1.39	10.58000	0.22000	0.42420	0.00970	0.84853	2484.0	19.0	2283.0	45.0	2666	14	2666.0	14.0	14.4	Single Age
12WPY12_86	2.32	91.00	19.48000	0.72000	0.21610	0.00900	0.60999	3064.0	35.0	1259.0	48.0	4668	42	DISC	DISC	73.0	Single Age
12WPY12_87	933.00	3.04	0.84900	0.01800	0.09630	0.00220	0.83555	623.5	9.8	592.0	13.0	712	14	592.0	13.0	5.1	Single Age
12WPY12_88	481.00	3.86	1.53800	0.03000	0.15210	0.00280	0.82563	946.0	12.0	915.0	16.0	1016	13	915.0	16.0	3.3	Single Age
12WPY12_89	366.00	0.95	0.93000	0.01800	0.10560	0.00220	0.75643	667.1	9.4	647.0	13.0	738	21	647.0	13.0	3.0	Single Age
12WPY12_90	141.80	1.69	2.25500	0.03500	0.20260	0.00400	0.74704	1198.0	11.0	1189.0	22.0	1213	17	1189.0	22.0	0.8	Single Age
12WPY12_91	126.00	2.19	0.62500	0.03000	0.07860	0.00350	0.92597	489.0	19.0	490.0	21.0	510	26	490.0	21.0	0.2	Single Age
12WPY12_92	522.00	6.03	0.74000	0.01200	0.08880	0.00170	0.68142	562.1	7.0	548.2	9.8	601	16	548.2	9.8	2.5	Single Age
12WPY12_93	526.00	1.28	0.73400	0.04500	0.08950	0.00500	0.97507	552.0	28.0	551.0	30.0	582	21	551.0	30.0	0.2	Single Age
12WPY12_94	103.70	1.31	5.46800	0.09400	0.32760	0.00750	0.67419	1896.0	14.0	1825.0	36.0	1976	19	1976.0	19.0	7.6	Single Age
12WPY12_95	799.00	1.76	8.41000	0.14000	0.36790	0.00750	0.74175	2278.0	16.0	2018.0	36.0	2510	15	2510.0	15.0	19.6	Single Age
12WPY12_96	839.00	4.55	0.80540	0.00950	0.09500	0.00140	0.55824	599.7	5.4	586.4	8.3	649	19	586.4	8.3	2.2	Single Age
12WPY12_97	128.50	1.15	0.99200	0.03300	0.10390	0.00350	0.55893	699.0	17.0	637.0	20.0	921	49	637.0	20.0	8.9	Single Age
12WPY12_98	347.00	5.06	0.83900	0.01200	0.09840	0.00180	0.70842	618.1	6.4	605.0	10.0	653	18	605.0	10.0	2.1	Single Age
12WPY12_99	266.80	1.14	0.98500	0.01100	0.11170	0.00140	0.44042	696.0	5.5	682.3	8.0	733	17	682.3	8.0	2.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY12_101	293.80	0.65	5.26900	0.07500	0.30050	0.00500	0.57882	1867.0	12.0	1693.0	25.0	2051	14	2051.0	14.0	17.5	Single Age
12WPY12_103	170.30	1.00	4.98800	0.07300	0.28890	0.00640	0.81218	1816.0	12.0	1640.0	33.0	2032	16	2032.0	16.0	19.3	Single Age
12WPY12_104	74.00	1.06	5.35800	0.09700	0.31910	0.00570	0.70913	1878.0	16.0	1789.0	29.0	1963	14	1963.0	14.0	8.9	Single Age
12WPY12_105	350.00	1.25	8.42000	0.14000	0.37470	0.00660	0.53689	2276.0	15.0	2060.0	31.0	2502	20	2502.0	20.0	17.7	Single Age
12WPY12_106	8.49	153.00	5.19000	0.16000	0.07540	0.00240	0.31201	1850.0	26.0	469.0	14.0	4266	31	DISC	DISC	74.6	Single Age
12WPY12_107	540.00	76.00	0.65200	0.01200	0.08040	0.00200	0.53878	509.8	7.5	498.0	12.0	577	33	498.0	12.0	2.3	Rim
12WPY12_107	647.00	16.05	1.65100	0.03500	0.11730	0.00220	0.51667	991.0	13.0	715.0	13.0	1671	23	DISC	DISC	27.9	Core
12WPY12_108	389.00	1.13	0.79600	0.01400	0.09740	0.00220	0.81532	594.3	8.0	599.0	13.0	594	14	599.0	13.0	0.8	Single Age
12WPY12_109	307.00	9.40	0.82200	0.01700	0.09820	0.00220	0.83450	608.2	9.5	604.0	13.0	647	13	604.0	13.0	0.7	Single Age
12WPY12_110	271.00	1.46	1.06300	0.02600	0.11670	0.00310	0.80108	734.0	13.0	711.0	18.0	795	22	711.0	18.0	3.1	Single Age
12WPY12_111	409.00	13.80	0.42400	0.01500	0.05560	0.00140	0.71399	360.0	10.0	348.7	8.4	445	33	348.7	8.4	3.1	Single Age
12WPY12_112	294.90	2.30	0.92600	0.01200	0.10700	0.00170	0.40702	665.4	6.2	655.0	10.0	723	23	655.0	10.0	1.6	Single Age
12WPY12_113	104.70	1.01	1.14400	0.02900	0.12230	0.00280	0.69462	774.0	14.0	746.0	16.0	831	29	746.0	16.0	3.6	Single Age
12WPY12_114	253.00	2.72	5.22000	0.12000	0.29280	0.00550	0.65753	1855.0	19.0	1655.0	27.0	2082	19	2082.0	19.0	20.5	Single Age
12WPY12_115	5.98	-3000.00	4.42000	0.16000	0.06240	0.00240	0.41221	1715.0	30.0	390.0	14.0	4258	33	DISC	DISC	77.3	Single Age
12WPY12_116	560.00	1.95	0.67500	0.01300	0.08520	0.00200	0.83933	523.2	8.2	528.0	12.0	527	17	528.0	12.0	0.9	Single Age
12WPY12_117	655.00	93.20	0.33810	0.00640	0.04600	0.00110	0.29512	295.6	4.8	290.2	6.6	318	33	290.2	6.6	1.8	Single Age
12WPY12_118	187.00	2.23	1.08700	0.03100	0.11590	0.00360	0.74573	747.0	15.0	709.0	20.0	886	25	709.0	20.0	5.1	Single Age
12WPY12_119	194.00	0.44	0.78400	0.01400	0.09400	0.00170	0.75027	587.4	8.0	579.0	10.0	628	21	579.0	10.0	1.4	Single Age
12WPY12_120	30.30	0.69	2.02400	0.05000	0.19870	0.00460	0.72401	1124.0	17.0	1168.0	25.0	1044	18	1168.0	25.0	3.9	Single Age
12WPY12_121	235.00	3.46	1.46300	0.02000	0.14970	0.00290	0.56746	914.6	8.4	899.0	16.0	937	22	899.0	16.0	1.7	Single Age
12WPY12_122	138.60	2.38	0.84900	0.01600	0.10130	0.00250	0.30795	623.4	8.7	622.0	14.0	651	21	622.0	14.0	0.2	Single Age
12WPY12_123	198.00	0.84	4.33400	0.07800	0.28280	0.00670	0.71986	1702.0	15.0	1608.0	33.0	1826	18	1826.0	18.0	11.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY12_124	461.00	8.20	0.82500	0.04300	0.09510	0.00400	0.88218	610.0	24.0	585.0	24.0	691	32	585.0	24.0	4.1	Rim
12WPY12_124	273.90	0.86	4.15700	0.07700	0.26730	0.00540	0.74991	1669.0	15.0	1526.0	27.0	1868	15	1868.0	15.0	18.3	Core
12WPY13_1	386.00	14.81	0.34680	0.00600	0.04802	0.00055	0.45536	302.2	4.6	302.3	3.4	294	37	302.3	3.4	0.0	Rim
12WPY13_1	556.00	2.78	0.80100	0.02200	0.07070	0.00130	0.94911	597.0	13.0	440.4	7.6	1242	23	DISC	DISC	26.2	Core
12WPY13_2	313.00	5.41	0.38000	0.02000	0.05160	0.00260	0.91007	327.0	15.0	324.0	16.0	335	48	324.0	16.0	0.9	Rim
12WPY13_2	325.00	1.58	0.58700	0.00640	0.07552	0.00065	0.85110	468.9	4.1	469.3	3.9	460	14	469.3	3.9	0.1	Core
12WPY13_4	554.00	3.80	1.02300	0.03500	0.10720	0.00350	0.90095	715.0	18.0	656.0	20.0	897	34	656.0	20.0	8.3	Rim
12WPY13_4	132.30	1.59	1.82700	0.02400	0.18080	0.00250	0.78035	1054.6	8.7	1071.0	14.0	1003	19	1071.0	14.0	1.6	Core
12WPY13_5	434.00	11.40	0.28470	0.00440	0.03871	0.00048	0.28286	254.4	3.5	244.8	3.0	304	35	244.8	3.0	3.8	Rim
12WPY13_5	98.20	0.35	0.72000	0.01900	0.08670	0.00190	0.89747	550.0	11.0	536.0	11.0	579	23	536.0	11.0	2.5	Core
12WPY13_6	307.00	9.42	0.32190	0.00450	0.04466	0.00052	0.54732	283.2	3.4	281.6	3.2	277	24	281.6	3.2	0.6	Single Age
12WPY13_7	2660.00	31.79	0.50860	0.00590	0.06365	0.00078	0.90721	417.3	4.0	397.8	4.7	492	11	397.8	4.7	4.7	Single Age
12WPY13_8	197.00	6.43	0.79800	0.01900	0.09420	0.00170	0.87538	595.0	11.0	580.4	9.9	645	22	580.4	9.9	2.5	Single Age
12WPY13_9	169.50	0.98	0.59630	0.00910	0.07674	0.00075	0.61592	474.7	5.8	476.6	4.5	474	28	476.6	4.5	0.4	Single Age
12WPY13_10	10.97	172.00	4.26700	0.09000	0.05320	0.00140	0.54454	1689.0	17.0	333.8	8.6	4478	37	DISC	DISC	80.2	Single Age
12WPY13_11	160.10	13.00	0.73600	0.01600	0.09050	0.00180	0.78879	559.8	9.1	558.0	11.0	571	31	558.0	11.0	0.3	Single Age
12WPY13_12	278.60	3.54	1.72500	0.02800	0.15000	0.00200	0.79400	1017.0	11.0	901.0	11.0	1277	14	DISC	DISC	11.4	Single Age
12WPY13_13	157.60	0.84	8.71000	0.20000	0.38960	0.00860	0.96941	2304.0	21.0	2119.0	40.0	2477.2	9.1	2477.2	9.1	14.5	Single Age
12WPY13_14	139.50	1.69	1.60200	0.02400	0.15670	0.00220	0.86268	971.4	9.7	940.0	12.0	1045	16	940.0	12.0	3.2	Single Age
12WPY13_15	495.00	12.36	0.81400	0.03300	0.06220	0.00200	0.86129	604.0	19.0	389.0	12.0	1539	35	DISC	DISC	35.6	Rim
12WPY13_15	337.60	3.23	3.48900	0.08300	0.13380	0.00290	0.90085	1523.0	19.0	809.0	17.0	2734	19	DISC	DISC	46.9	Core
12WPY13_16	795.00	3.31	0.56720	0.00880	0.06563	0.00096	0.91996	456.0	5.7	409.7	5.8	646	14	DISC	DISC	10.2	Single Age
12WPY13_17	918.00	30.00	0.32640	0.00960	0.04560	0.00110	0.74391	286.7	7.3	287.2	6.8	299	42	287.2	6.8	0.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_18	335.90	3.95	2.75000	0.23000	0.13640	0.00950	0.96456	1330.0	63.0	823.0	54.0	2284	41	DISC	DISC	38.1	Single Age
12WPY13_19	182.90	0.54	0.71500	0.00660	0.08854	0.00073	0.53763	547.6	3.9	546.9	4.3	558	18	546.9	4.3	0.1	Single Age
12WPY13_20	206.00	2.21	0.65450	0.00790	0.08220	0.00100	0.67544	511.0	4.9	509.3	6.0	529	20	509.3	6.0	0.3	Single Age
12WPY13_21	570.00	8.23	0.28360	0.00360	0.03821	0.00075	0.07844	253.5	2.8	241.7	4.7	356	51	241.7	4.7	4.7	Rim
12WPY13_21	574.00	1.08	0.43740	0.00870	0.05190	0.00130	0.67856	368.2	6.1	325.9	7.8	612	40	DISC	DISC	11.5	Core
12WPY13_22	540.00	21.20	0.34420	0.00530	0.04744	0.00065	0.74638	300.2	4.0	298.8	4.0	314	21	298.8	4.0	0.5	Single Age
12WPY13_23	86.50	0.79	1.77900	0.02700	0.17830	0.00340	0.78589	1037.3	9.8	1057.0	18.0	1018	23	1057.0	18.0	1.9	Single Age
12WPY13_24	755.00	11.92	0.44090	0.00900	0.05020	0.00100	0.73423	370.8	6.3	315.6	6.3	730	34	DISC	DISC	14.9	Rim
12WPY13_24	554.00	4.58	0.80900	0.02200	0.06550	0.00110	0.87267	601.0	12.0	408.9	6.5	1400	24	DISC	DISC	32.0	Core
12WPY13_25	247.00	1.10	2.64900	0.03800	0.17280	0.00230	0.92354	1314.0	11.0	1027.0	13.0	1823	16	DISC	DISC	21.8	Single Age
12WPY13_26	412.00	6.82	0.38090	0.00420	0.05168	0.00043	0.56687	327.6	3.1	324.8	2.6	361	21	324.8	2.6	0.9	Single Age
12WPY13_27	250.00	11.70	0.33390	0.00700	0.04710	0.00100	0.49642	292.4	5.3	297.0	6.4	262	48	297.0	6.4	1.6	Rim
12WPY13_27	260.10	2.33	0.48150	0.00630	0.06396	0.00062	0.67734	398.9	4.3	399.6	3.8	403	24	399.6	3.8	0.2	Core
12WPY13_28	451.00	11.27	0.30610	0.00570	0.03973	0.00054	0.04895	271.0	4.4	251.1	3.4	400	38	251.1	3.4	7.3	Single Age
12WPY13_29	575.00	2.20	0.95200	0.01200	0.10340	0.00140	0.87761	678.7	6.4	634.4	8.0	824	14	634.4	8.0	6.5	Single Age
12WPY13_30	273.00	0.76	9.43000	0.28000	0.39160	0.00950	0.96083	2380.0	28.0	2128.0	44.0	2587	19	2587.0	19.0	17.7	Single Age
12WPY13_31	150.70	2.09	1.12800	0.02400	0.10820	0.00130	0.28335	769.0	12.0	662.1	7.8	1056	44	DISC	DISC	13.9	Single Age
12WPY13_32	119.80	1.70	1.43600	0.02200	0.14900	0.00230	0.71607	903.5	9.1	895.0	13.0	921	24	895.0	13.0	0.9	Single Age
12WPY13_33	594.00	31.00	0.27290	0.00490	0.03666	0.00070	0.60868	245.0	3.9	232.1	4.4	346	33	232.1	4.4	5.3	Single Age
12WPY13_34	880.00	2.30	3.18400	0.08200	0.20380	0.00470	0.93826	1452.0	20.0	1195.0	25.0	1830	20	DISC	DISC	17.7	Single Age
12WPY13_35	1084.00	27.60	0.37090	0.00680	0.04876	0.00082	0.85673	320.7	4.9	306.9	5.1	427	21	306.9	5.1	4.3	Single Age
12WPY13_36	589.00	23.60	0.32000	0.01600	0.04170	0.00180	0.87585	282.0	12.0	263.0	11.0	436	49	263.0	11.0	6.7	Rim
12WPY13_36	396.00	5.04	1.01600	0.03700	0.09900	0.00300	0.92596	710.0	19.0	608.0	17.0	1006	25	DISC	DISC	14.4	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_37	326.00	18.30	0.28040	0.00880	0.03800	0.00110	0.75502	250.9	7.0	240.2	6.6	316	38	240.2	6.6	4.3	Rim
12WPY13_37	445.00	2.01	0.50440	0.00810	0.06485	0.00098	0.77334	414.5	5.4	405.0	6.0	450	19	405.0	6.0	2.3	Core
12WPY13_38	137.00	7.90	0.30610	0.00960	0.03740	0.00130	0.03837	271.1	7.5	236.8	8.1	580	130	DISC	DISC	12.7	Rim
12WPY13_38	336.00	0.71	2.99500	0.04400	0.19460	0.00260	0.93021	1405.0	11.0	1146.0	14.0	1825	10	DISC	DISC	18.4	Core
12WPY13_39	575.00	15.49	0.34770	0.00810	0.04680	0.00120	0.66787	303.0	6.1	294.7	7.5	368	48	294.7	7.5	2.7	Rim
12WPY13_39	290.90	5.76	0.47900	0.01100	0.06180	0.00120	0.85603	396.9	7.3	386.5	7.4	434	26	386.5	7.4	2.6	Core
12WPY13_40	90.10	0.39	0.84000	0.01100	0.10170	0.00110	0.50641	620.0	6.1	624.5	6.6	591	27	624.5	6.6	0.7	Single Age
12WPY13_41	748.00	3.75	0.30680	0.00720	0.04150	0.00096	0.94560	271.4	5.6	262.0	5.9	325	14	262.0	5.9	3.5	Single Age
12WPY13_42	202.90	2.17	0.51970	0.00800	0.06824	0.00086	0.82638	424.7	5.4	425.5	5.2	403	23	425.5	5.2	0.2	Single Age
12WPY13_43	697.00	34.00	0.27090	0.00420	0.03743	0.00052	0.74481	243.4	3.3	236.9	3.2	307	24	236.9	3.2	2.7	Single Age
12WPY13_44	544.00	22.30	0.26610	0.00600	0.03595	0.00058	0.83840	239.5	4.8	227.7	3.6	315	32	227.7	3.6	4.9	Single Age
12WPY13_45	495.00	8.18	0.33500	0.01400	0.04340	0.00130	0.91587	293.0	11.0	274.1	8.2	408	41	274.1	8.2	6.5	Single Age
12WPY13_46	433.00	13.30	0.34520	0.00510	0.04537	0.00061	0.69427	301.0	3.9	286.0	3.8	420	28	286.0	3.8	5.0	Single Age
12WPY13_47	214.70	0.64	0.84330	0.00960	0.10110	0.00110	0.72411	620.7	5.3	621.0	6.7	606	16	621.0	6.7	0.0	Single Age
12WPY13_48	1130.00	18.20	0.33660	0.00890	0.04610	0.00120	0.85303	294.5	6.8	290.7	7.5	349	39	290.7	7.5	1.3	Rim
12WPY13_48	70.80	0.63	0.65400	0.01200	0.08320	0.00140	0.04923	510.6	7.2	515.3	8.0	505	42	515.3	8.0	0.9	Core
12WPY13_49	1211.00	8.58	0.44000	0.00640	0.04943	0.00067	0.81884	370.2	4.5	311.0	4.1	774	24	DISC	DISC	16.0	Rim
12WPY13_49	645.00	3.72	1.02300	0.01900	0.06980	0.00110	0.75414	715.3	9.5	435.2	6.9	1733	17	DISC	DISC	39.2	Core
12WPY13_50	552.00	10.50	0.39300	0.02100	0.05140	0.00280	0.87932	336.0	16.0	323.0	17.0	409	38	323.0	17.0	3.9	Rim
12WPY13_50	789.00	2.52	0.50640	0.00490	0.06420	0.00065	0.80681	415.9	3.3	401.1	3.9	501	13	401.1	3.9	3.6	Core
12WPY13_51	256.60	9.77	0.36890	0.00950	0.05027	0.00088	0.47570	318.3	7.0	316.1	5.4	322	30	316.1	5.4	0.7	Single Age
12WPY13_52	1602.00	17.17	0.35580	0.00670	0.04523	0.00091	0.91095	309.6	4.9	285.1	5.6	460	18	285.1	5.6	7.9	Single Age
12WPY13_53	285.00	11.90	0.27010	0.00660	0.03598	0.00080	0.74480	242.8	5.3	227.8	5.0	342	36	227.8	5.0	6.2	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_53	621.00	8.10	0.66100	0.01700	0.05620	0.00150	0.90086	515.0	11.0	352.5	9.0	1276	23	DISC	DISC	31.6	Core
12WPY13_54	3.37	-37.00	7.89000	0.21000	0.08370	0.00320	0.74084	2213.0	24.0	518.0	19.0	4684	45	DISC	DISC	76.6	Single Age
12WPY13_55	395.00	26.40	0.27420	0.00390	0.03640	0.00060	0.29428	246.0	3.1	230.5	3.7	350	41	230.5	3.7	6.3	Rim
12WPY13_55	378.00	6.80	0.35430	0.00620	0.04894	0.00078	0.74036	308.5	4.5	308.0	4.8	308	28	308.0	4.8	0.2	Core
12WPY13_56	4.96	-29.00	7.61000	0.22000	0.07960	0.00270	0.57889	2181.0	25.0	494.0	16.0	4677	41	DISC	DISC	77.3	Single Age
12WPY13_57	359.10	7.92	0.34650	0.00440	0.04716	0.00045	0.59348	302.4	3.3	297.0	2.8	342	21	297.0	2.8	1.8	Single Age
12WPY13_58	372.00	1.84	2.83000	0.12000	0.14700	0.00550	0.98829	1359.0	30.0	883.0	31.0	2238	19	DISC	DISC	35.0	Rim
12WPY13_58	180.20	0.61	8.71000	0.22000	0.37400	0.00800	0.96161	2306.0	23.0	2047.0	38.0	2546	13	2546.0	13.0	19.6	Core
12WPY13_59	440.00	8.71	0.34610	0.00350	0.04755	0.00040	0.54068	301.7	2.6	299.5	2.5	331	20	299.5	2.5	0.7	Single Age
12WPY13_60	228.00	4.07	0.51400	0.01600	0.06630	0.00210	0.83142	421.0	11.0	414.0	13.0	480	46	414.0	13.0	1.7	Rim
12WPY13_60	66.10	1.02	1.06800	0.02500	0.12310	0.00240	0.74913	737.0	12.0	748.0	14.0	694	29	748.0	14.0	1.5	Core
12WPY13_61	518.00	1.26	0.46810	0.00770	0.06090	0.00100	0.84495	389.6	5.3	381.1	6.1	442	19	381.1	6.1	2.2	Single Age
12WPY13_62	449.00	17.80	0.30700	0.01600	0.04040	0.00150	0.84853	271.0	13.0	255.2	9.0	386	60	255.2	9.0	5.8	Rim
12WPY13_62	75.30	1.09	7.67700	0.09400	0.33190	0.00630	0.72701	2194.0	11.0	1847.0	31.0	2530	19	2530.0	19.0	27.0	Core
12WPY13_63	373.00	16.10	0.27690	0.00580	0.03756	0.00068	0.64640	248.1	4.6	237.7	4.2	320	32	237.7	4.2	4.2	Rim
12WPY13_63	601.00	2.18	0.46600	0.01000	0.05830	0.00130	0.86433	388.5	7.2	365.5	7.7	482	20	365.5	7.7	5.9	Core
12WPY13_64	270.80	2.54	0.84000	0.02000	0.09110	0.00180	0.75003	619.0	11.0	562.0	11.0	822	47	562.0	11.0	9.2	Rim
12WPY13_64	105.00	1.66	1.43000	0.01600	0.14830	0.00180	0.66687	901.5	6.8	891.0	10.0	929	21	891.0	10.0	1.2	Core
12WPY13_65	13.00	0.46	1.72300	0.05700	0.17320	0.00370	0.59744	1015.0	21.0	1029.0	20.0	978	57	1029.0	20.0	1.4	Single Age
12WPY13_66	1820.00	3.30	0.31410	0.00590	0.04166	0.00077	0.93337	277.2	4.6	263.1	4.8	376	15	263.1	4.8	5.1	Single Age
12WPY13_67	495.00	35.40	0.35200	0.01600	0.04950	0.00250	0.85687	306.0	12.0	311.0	16.0	308	62	311.0	16.0	1.6	Rim
12WPY13_67	34.80	1.10	11.15000	0.15000	0.45420	0.00750	0.83100	2535.0	13.0	2413.0	33.0	2632	16	2632.0	16.0	8.3	Core
12WPY13_68	282.00	10.19	0.38090	0.00660	0.05027	0.00064	0.68445	327.5	4.9	316.2	3.9	396	26	316.2	3.9	3.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_69	621.00	3.45	0.52900	0.01900	0.06160	0.00190	0.94340	430.0	13.0	385.0	11.0	640	29	DISC	DISC	10.5	Rim
12WPY13_69	357.60	1.17	0.78300	0.01600	0.08690	0.00160	0.74468	586.9	8.8	536.9	9.3	793	26	536.9	9.3	8.5	Core
12WPY13_70	421.00	19.90	0.34260	0.00830	0.03928	0.00048	0.69321	300.4	6.6	248.4	3.0	714	40	DISC	DISC	17.3	Single Age
12WPY13_71	894.00	26.30	0.36500	0.01900	0.04770	0.00170	0.58915	316.0	14.0	300.0	10.0	342	67	300.0	10.0	5.1	Rim
12WPY13_71	147.00	2.50	1.04900	0.02100	0.12180	0.00230	0.78558	728.0	10.0	743.0	13.0	660	25	743.0	13.0	2.1	Core
12WPY13_72	1765.00	2.20	0.35130	0.00430	0.04775	0.00054	0.89058	305.6	3.2	300.7	3.3	343	11	300.7	3.3	1.6	Single Age
12WPY13_73	530.00	14.40	0.34800	0.02200	0.04740	0.00220	0.82447	303.0	16.0	299.0	14.0	332	65	299.0	14.0	1.3	Rim
12WPY13_73	49.00	0.43	1.02400	0.01800	0.11980	0.00230	0.55369	716.7	8.8	729.0	13.0	651	37	729.0	13.0	1.7	Core
12WPY13_74	142.00	4.81	0.33900	0.01800	0.04680	0.00300	0.85451	296.0	14.0	295.0	19.0	300	130	295.0	19.0	0.3	Rim
12WPY13_74	58.40	1.50	1.73900	0.06300	0.17090	0.00600	0.90724	1020.0	23.0	1016.0	33.0	1051	29	1016.0	33.0	0.4	Core
12WPY13_75	308.00	0.56	0.86100	0.01400	0.10070	0.00110	0.56059	630.6	7.4	618.6	6.5	659	29	618.6	6.5	1.9	Single Age
12WPY13_76	547.00	12.00	0.54900	0.04900	0.05830	0.00270	0.90110	442.0	32.0	365.0	17.0	810	97	DISC	DISC	17.4	Rim
12WPY13_76	234.00	1.73	2.86200	0.08300	0.19130	0.00430	0.97112	1369.0	22.0	1128.0	23.0	1770	13	DISC	DISC	17.6	Core
12WPY13_77	109.00	3.62	0.48900	0.01300	0.06150	0.00120	0.87652	403.7	9.1	384.5	7.1	487	36	384.5	7.1	4.8	Single Age
12WPY13_78	324.00	20.70	0.30600	0.02200	0.03756	0.00057	0.25792	270.0	16.0	237.7	3.5	490	140	DISC	DISC	12.0	Rim
12WPY13_78	89.00	1.24	0.63900	0.01800	0.07690	0.00180	0.90245	501.0	11.0	477.0	11.0	554	34	477.0	11.0	4.8	Core
12WPY13_79	721.00	36.20	0.25560	0.00470	0.03436	0.00067	0.78152	231.0	3.8	217.7	4.2	326	30	217.7	4.2	5.8	Rim
12WPY13_79	190.90	2.65	0.85900	0.05100	0.09190	0.00450	0.91871	627.0	28.0	566.0	27.0	791	43	566.0	27.0	9.7	Core
12WPY13_80	838.00	5.90	0.34440	0.00390	0.04653	0.00054	0.83309	300.4	2.9	293.2	3.3	332	18	293.2	3.3	2.4	Single Age
12WPY13_81	161.00	6.74	0.38210	0.00490	0.05120	0.00042	0.27783	328.9	3.7	321.8	2.6	375	31	321.8	2.6	2.2	Single Age
12WPY13_82	731.00	12.30	0.39500	0.02100	0.05150	0.00210	0.83613	338.0	15.0	324.0	13.0	401	34	324.0	13.0	4.1	Rim
12WPY13_82	252.00	2.64	0.78400	0.01500	0.09270	0.00120	0.58929	587.5	8.4	571.3	7.1	655	24	571.3	7.1	2.8	Core
12WPY13_83	620.00	14.50	0.43500	0.04700	0.05470	0.00520	0.94842	363.0	34.0	343.0	32.0	505	77	343.0	32.0	5.5	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_83	102.00	0.99	4.60600	0.09700	0.29330	0.00480	0.89105	1749.0	18.0	1664.0	26.0	1860	25	1860.0	25.0	10.5	Core
12WPY13_84	543.00	15.70	0.36000	0.03400	0.04410	0.00250	0.94610	311.0	25.0	278.0	16.0	513	95	DISC	DISC	10.6	Rim
12WPY13_84	931.00	11.36	1.65600	0.03300	0.10930	0.00180	0.80505	992.0	13.0	668.0	10.0	1779	21	DISC	DISC	32.7	Core
12WPY13_85	283.00	3.37	0.96100	0.02700	0.09370	0.00170	0.81409	685.0	14.0	577.0	10.0	1045	36	DISC	DISC	15.8	Single Age
12WPY13_86	820.00	4.56	0.50520	0.00900	0.06340	0.00100	0.94149	416.3	5.9	396.3	6.3	524	12	396.3	6.3	4.8	Single Age
12WPY13_87	928.00	3.15	1.47300	0.09100	0.11000	0.00530	0.99505	910.0	37.0	671.0	30.0	1541	26	DISC	DISC	26.3	Single Age
12WPY13_88	870.00	2.55	4.31000	0.12000	0.19240	0.00470	0.96432	1695.0	23.0	1134.0	25.0	2456	10	DISC	DISC	33.1	Single Age
12WPY13_89	521.00	14.10	0.33890	0.00890	0.04552	0.00058	0.44884	296.1	6.6	286.9	3.6	378	49	286.9	3.6	3.1	Single Age
12WPY13_90	134.70	3.91	0.33800	0.01200	0.04770	0.00140	0.52909	295.5	9.0	300.5	8.5	293	78	300.5	8.5	1.7	Rim
12WPY13_90	205.80	5.49	0.51900	0.01100	0.06620	0.00120	0.80761	423.9	7.4	413.0	7.3	493	28	413.0	7.3	2.6	Core
12WPY13_91	715.00	5.40	0.27970	0.00530	0.03767	0.00066	0.94153	250.2	4.2	238.3	4.1	330	14	238.3	4.1	4.8	Single Age
12WPY13_92	365.90	16.00	0.34700	0.02200	0.04754	0.00062	0.10721	302.0	17.0	299.4	3.8	320	150	299.4	3.8	0.9	Rim
12WPY13_92	130.40	0.99	0.75600	0.01600	0.09320	0.00150	0.48444	571.0	9.2	574.4	9.1	540	32	574.4	9.1	0.6	Core
12WPY13_93	229.00	2.76	0.62000	0.01900	0.07420	0.00180	0.91543	489.0	12.0	461.0	11.0	608	24	461.0	11.0	5.7	Rim
12WPY13_93	215.40	1.55	0.82000	0.02000	0.09370	0.00200	0.81386	608.0	11.0	577.0	12.0	724	32	577.0	12.0	5.1	Core
12WPY13_94	298.00	1.97	0.79500	0.03100	0.09630	0.00320	0.94425	593.0	17.0	593.0	19.0	609	21	593.0	19.0	0.0	Rim
12WPY13_94	161.00	1.50	1.02100	0.01000	0.11856	0.00099	0.58381	714.4	5.2	722.2	5.7	676	20	722.2	5.7	1.1	Core
12WPY13_95	40.40	1.16	0.90900	0.01600	0.10360	0.00140	0.18115	656.1	8.6	635.2	8.3	727	40	635.2	8.3	3.2	Single Age
12WPY13_96	164.70	1.94	0.96900	0.02200	0.11050	0.00160	0.73410	687.0	11.0	675.3	9.5	729	31	675.3	9.5	1.7	Single Age
12WPY13_97	611.00	27.80	0.63100	0.02600	0.07640	0.00270	0.97096	498.0	16.0	475.0	16.0	616	24	475.0	16.0	4.6	Single Age
12WPY13_98	151.80	2.90	3.40600	0.04400	0.20050	0.00240	0.74084	1505.0	10.0	1178.0	13.0	1992	16	DISC	DISC	21.7	Single Age
12WPY13_99	448.00	8.52	0.38900	0.01000	0.05190	0.00100	0.65493	334.7	7.3	326.0	6.3	404	42	326.0	6.3	2.6	Rim
12WPY13_99	200.00	1.73	0.73300	0.02200	0.08450	0.00260	0.10958	558.0	13.0	523.0	15.0	677	69	523.0	15.0	6.3	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_100	175.40	0.58	4.24000	0.14000	0.25770	0.00800	0.98190	1679.0	29.0	1477.0	41.0	1940	17	1940.0	17.0	23.9	Single Age
12WPY13_101	475.00	13.25	0.29300	0.01400	0.03930	0.00170	0.89659	261.0	11.0	249.0	10.0	325	47	249.0	10.0	4.6	Rim
12WPY13_101	294.00	3.44	0.56200	0.01200	0.06850	0.00130	0.89766	452.1	8.0	427.2	8.0	545	21	427.2	8.0	5.5	Core
12WPY13_102	304.00	10.80	0.38700	0.01700	0.05150	0.00190	0.81297	332.0	12.0	324.0	12.0	381	49	324.0	12.0	2.4	Single Age
12WPY13_103	400.00	22.00	0.34300	0.01600	0.04710	0.00280	0.80217	299.0	12.0	296.0	17.0	325	89	296.0	17.0	1.0	Rim
12WPY13_103	403.00	24.20	0.80000	0.01400	0.09680	0.00140	0.84798	596.5	7.8	595.6	8.1	596	22	595.6	8.1	0.2	Core
12WPY13_104	531.00	21.80	0.29900	0.01300	0.03980	0.00110	0.42549	265.5	9.8	251.8	7.0	354	52	251.8	7.0	5.2	Rim
12WPY13_104	779.00	4.24	0.77600	0.04200	0.08360	0.00380	0.96064	582.0	23.0	517.0	23.0	820	36	DISC	DISC	11.2	Core
12WPY13_105	645.00	53.60	0.31610	0.00710	0.04352	0.00092	0.77604	278.8	5.5	274.6	5.7	347	36	274.6	5.7	1.5	Rim
12WPY13_105	177.00	8.80	0.56100	0.02800	0.07280	0.00260	0.85288	451.0	18.0	453.0	15.0	438	58	453.0	15.0	0.4	Core
12WPY13_106	655.00	26.50	0.32900	0.01600	0.04508	0.00094	0.88606	288.0	12.0	284.2	5.8	298	60	284.2	5.8	1.3	Rim
12WPY13_106	85.60	2.16	0.94000	0.02300	0.11070	0.00210	0.85350	675.0	12.0	676.0	12.0	686	27	676.0	12.0	0.1	Core
12WPY13_107	973.00	34.00	0.33800	0.03200	0.04720	0.00310	0.87110	295.0	24.0	298.0	19.0	270	160	298.0	19.0	1.0	Rim
12WPY13_107	130.00	2.58	0.66000	0.02100	0.08520	0.00240	0.85263	515.0	13.0	527.0	14.0	473	31	527.0	14.0	2.3	Core
12WPY13_108	671.00	31.10	0.31350	0.00580	0.04199	0.00067	0.83127	277.3	4.5	265.1	4.1	388	22	265.1	4.1	4.4	Single Age
12WPY13_109	290.00	2.01	0.41000	0.00680	0.05625	0.00088	0.81810	348.6	4.9	352.8	5.3	334	23	352.8	5.3	1.2	Single Age
12WPY13_110	340.00	2.14	0.65500	0.02300	0.07610	0.00250	0.94369	517.0	15.0	473.0	15.0	682	26	473.0	15.0	8.5	Single Age
12WPY13_111	215.60	2.06	0.59100	0.01200	0.07660	0.00160	0.77305	471.4	7.4	475.5	9.5	450	30	475.5	9.5	0.9	Single Age
12WPY13_112	522.00	36.40	0.33440	0.00560	0.04651	0.00086	0.84903	292.8	4.2	293.0	5.3	320	22	293.0	5.3	0.1	Single Age
12WPY13_113	297.00	10.79	0.63000	0.05500	0.05830	0.00260	0.93467	492.0	35.0	365.0	16.0	1110	110	DISC	DISC	25.8	Rim
12WPY13_113	41.40	0.96	7.04000	0.28000	0.31600	0.01100	0.94236	2114.0	35.0	1772.0	53.0	2457	20	2457.0	20.0	27.9	Core
12WPY13_114	88.50	1.48	7.77000	0.16000	0.34090	0.00740	0.88835	2203.0	18.0	1890.0	35.0	2518	14	2518.0	14.0	24.9	Single Age
12WPY13_115	549.00	32.10	0.32030	0.00820	0.04400	0.00100	0.87398	281.9	6.3	277.8	6.3	330	25	277.8	6.3	1.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY13_116	513.00	16.72	0.36800	0.01200	0.04430	0.00170	0.83364	318.0	8.6	279.0	10.0	574	42	DISC	DISC	12.3	Rim
12WPY13_116	534.00	8.79	0.58090	0.00870	0.07060	0.00110	0.74464	464.9	5.6	439.5	6.7	551	22	439.5	6.7	5.5	Core
12WPY13_117	315.00	18.20	0.27620	0.00940	0.03729	0.00073	0.35757	247.5	7.5	236.0	4.5	335	64	236.0	4.5	4.6	Rim
12WPY13_117	144.00	1.99	6.18400	0.09800	0.28350	0.00490	0.81173	2001.0	14.0	1609.0	25.0	2391	18	DISC	DISC	32.7	Core
12WPY13_118	477.00	7.92	0.34660	0.00630	0.04657	0.00064	0.73782	301.9	4.7	293.4	3.9	389	24	293.4	3.9	2.8	Single Age
12WPY13_119	849.00	2.09	0.52500	0.01900	0.06150	0.00180	0.97515	428.0	13.0	384.0	11.0	655	20	DISC	DISC	10.3	Single Age
12WPY13_120	468.00	12.30	0.33600	0.01200	0.04640	0.00170	0.53451	294.2	9.5	293.0	10.0	302	63	293.0	10.0	0.4	Rim
12WPY13_120	74.80	0.64	0.81800	0.02400	0.10040	0.00270	0.80179	606.0	14.0	617.0	16.0	588	38	617.0	16.0	1.8	Core
12WPY13_121	957.00	34.00	0.32800	0.01600	0.04470	0.00210	0.92446	288.0	12.0	282.0	13.0	351	45	282.0	13.0	2.1	Rim
12WPY13_121	172.00	1.59	0.56940	0.00970	0.07290	0.00110	0.62388	457.3	6.3	453.4	6.8	476	29	453.4	6.8	0.9	Core
12WPY13_122	600.00	7.76	0.38900	0.01700	0.05130	0.00180	0.77894	333.0	12.0	323.0	11.0	403	55	323.0	11.0	3.0	Rim
12WPY13_122	38.40	0.89	0.94400	0.02800	0.11370	0.00250	0.73356	674.0	15.0	694.0	14.0	611	47	694.0	14.0	3.0	Core
12WPY13_123	920.00	30.90	0.31500	0.01600	0.04250	0.00260	0.94465	278.0	12.0	268.0	16.0	349	37	268.0	16.0	3.6	Rim
12WPY13_123	203.00	0.80	1.69400	0.02100	0.16890	0.00200	0.84035	1005.8	8.1	1006.0	11.0	1009	15	1006.0	11.0	0.0	Core
12WPY13_124	577.00	20.30	0.32200	0.01000	0.04450	0.00240	0.23534	283.5	7.7	281.0	15.0	310	150	281.0	15.0	0.9	Rim
12WPY13_124	75.10	0.94	1.03300	0.03200	0.09470	0.00230	0.81227	719.0	16.0	583.0	14.0	1180	35	DISC	DISC	18.9	Core
12WPY13_125	837.00	15.20	0.28720	0.00770	0.03799	0.00084	0.90772	256.2	6.1	240.3	5.2	351	26	240.3	5.2	6.2	Rim
12WPY13_125	379.00	2.32	0.47400	0.01700	0.06070	0.00190	0.89799	393.0	12.0	380.0	11.0	458	34	380.0	11.0	3.3	Core
12WPY13_126	780.00	53.60	0.25310	0.00360	0.03406	0.00046	0.64268	229.0	2.9	215.9	2.9	331	19	215.9	2.9	5.7	Single Age
12WPY18_1	308.00	2.50	0.69500	0.02100	0.08600	0.00210	0.93711	536.0	12.0	532.0	12.0	554	15	532.0	12.0	0.7	Single Age
12WPY18_2	262.00	1.69	0.66970	0.00950	0.07945	0.00085	0.37911	520.3	5.7	492.8	5.1	647	19	492.8	5.1	5.3	Single Age
12WPY18_3	194.00	0.88	1.05500	0.01500	0.11970	0.00110	0.34784	731.0	7.3	729.0	6.6	741	15	729.0	6.6	0.3	Single Age
12WPY18_4	261.00	1.16	0.88900	0.01100	0.10540	0.00100	0.64151	646.5	5.5	645.7	5.8	642	12	645.7	5.8	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY18_5	415.00	6.58	0.48430	0.00860	0.06310	0.00100	0.85336	400.7	5.8	394.2	6.2	444	12	394.2	6.2	1.6	Single Age
12WPY18_6	1915.00	27.69	0.76800	0.01100	0.09430	0.00120	0.97220	578.4	6.7	581.0	7.3	575.8	5.8	581.0	7.3	0.4	Single Age
12WPY18_7	319.60	1.71	1.08400	0.02300	0.12040	0.00230	0.90693	745.0	11.0	733.0	13.0	785.2	8.9	733.0	13.0	1.6	Single Age
12WPY18_8	294.00	8.20	0.51300	0.03300	0.06660	0.00350	0.94610	416.0	21.0	415.0	21.0	427	30	415.0	21.0	0.2	Single Age
12WPY18_9	99.20	2.94	1.00300	0.02000	0.11380	0.00150	0.25565	705.0	10.0	694.6	8.6	740	22	694.6	8.6	1.5	Single Age
12WPY18_10	185.80	5.22	7.05500	0.09900	0.32250	0.00430	0.90522	2117.0	12.0	1801.0	21.0	2444.2	5.7	2444.2	5.7	26.3	Single Age
12WPY18_11	201.20	0.70	0.88780	0.00960	0.10480	0.00110	0.44071	646.0	5.4	642.3	6.4	667	14	642.3	6.4	0.6	Single Age
12WPY18_12	174.00	1.58	1.34300	0.01700	0.14610	0.00160	0.65133	864.3	7.4	878.8	8.9	824	11	878.8	8.9	1.7	Single Age
12WPY18_13	315.00	1.04	1.20600	0.01800	0.13140	0.00190	0.77666	803.2	8.5	796.0	11.0	835	12	796.0	11.0	0.9	Single Age
12WPY18_14	348.00	58.20	0.72000	0.01400	0.08640	0.00130	0.81711	550.0	8.4	533.9	8.0	621	17	533.9	8.0	2.9	Single Age
12WPY18_15	839.00	8.00	0.40400	0.01300	0.05350	0.00160	0.92195	344.1	9.7	336.1	9.9	397	14	336.1	9.9	2.3	Rim
12WPY18_15	433.40	0.87	0.79190	0.00820	0.09614	0.00069	0.18370	592.2	4.7	591.7	4.1	596	14	591.7	4.1	0.1	Core
12WPY18_16	636.00	76.00	0.35950	0.00750	0.04915	0.00090	0.70916	311.6	5.6	309.3	5.5	328	16	309.3	5.5	0.7	Single Age
12WPY18_17	81.10	1.63	0.86900	0.01100	0.10290	0.00120	0.27504	634.6	6.0	631.1	7.1	657	19	631.1	7.1	0.6	Single Age
12WPY18_18	550.00	7.70	0.57800	0.02100	0.07190	0.00210	0.75045	462.0	13.0	447.0	12.0	552	22	447.0	12.0	3.2	Single Age
12WPY18_19	1191.00	2.75	1.13900	0.01200	0.12220	0.00110	0.70331	771.9	5.6	743.3	6.4	860.6	9.9	743.3	6.4	3.7	Single Age
12WPY18_20	533.00	161.20	0.33600	0.00340	0.04641	0.00038	0.37133	294.4	2.5	292.4	2.3	313	12	292.4	2.3	0.7	Single Age
12WPY18_21	870.00	12.40	0.38650	0.00780	0.05226	0.00094	0.90511	331.6	5.7	328.3	5.7	365	13	328.3	5.7	1.0	Single Age
12WPY18_23	169.00	1.58	0.80900	0.01400	0.09520	0.00230	0.53324	601.5	8.1	586.0	13.0	637	24	586.0	13.0	2.6	Single Age
12WPY18_24	476.00	157.00	0.35050	0.00350	0.04876	0.00038	0.37551	305.0	2.6	306.9	2.3	300	14	306.9	2.3	0.6	Single Age
12WPY18_25	309.00	1.13	0.71500	0.00800	0.08810	0.00110	0.64895	547.5	4.7	544.3	6.6	566	15	544.3	6.6	0.6	Single Age
12WPY18_26	699.00	1.36	0.88500	0.01900	0.10230	0.00190	0.94283	643.0	10.0	628.0	11.0	700	10	628.0	11.0	2.3	Single Age
12WPY18_27	1076.00	61.90	0.67630	0.00830	0.08302	0.00095	0.85952	524.3	5.0	514.1	5.7	575.7	8.2	514.1	5.7	1.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY18_28	265.00	8.10	0.66700	0.06100	0.08240	0.00680	0.98468	510.0	38.0	508.0	40.0	555	31	508.0	40.0	0.4	Single Age
12WPY18_29	192.80	1.39	0.89000	0.01000	0.10560	0.00100	0.31886	646.9	5.6	646.9	5.8	652	14	646.9	5.8	0.0	Single Age
12WPY18_30	357.00	1.56	1.69100	0.04800	0.16980	0.00460	0.94902	1003.0	19.0	1010.0	25.0	978	18	1010.0	25.0	0.7	Single Age
12WPY18_31	651.00	17.40	0.66600	0.02300	0.08230	0.00240	0.98417	517.0	15.0	510.0	14.0	566	15	510.0	14.0	1.4	Single Age
12WPY18_32	725.00	1.95	0.75990	0.00580	0.09193	0.00079	0.62859	573.9	3.3	566.9	4.7	589.8	9.1	566.9	4.7	1.2	Single Age
12WPY18_33	120.00	2.35	0.79000	0.05000	0.09680	0.00530	0.94603	593.0	29.0	595.0	31.0	599	25	595.0	31.0	0.3	Single Age
12WPY18_35	470.00	1.15	5.47000	0.09800	0.33250	0.00520	0.96462	1894.0	16.0	1850.0	25.0	1954.1	6.9	1954.1	6.9	5.3	Single Age
12WPY18_36	642.00	89.50	0.34780	0.00690	0.04804	0.00043	0.22650	303.0	5.2	302.5	2.7	299	30	302.5	2.7	0.2	Rim
12WPY18_36	481.00	1.40	1.15400	0.03600	0.11880	0.00180	0.55436	778.0	17.0	724.0	10.0	924	47	724.0	10.0	6.9	Core
12WPY18_37	479.00	120.10	0.34520	0.00590	0.04709	0.00058	0.64551	301.0	4.4	296.6	3.6	342	16	296.6	3.6	1.5	Single Age
12WPY18_38	372.00	96.00	0.36600	0.01200	0.04980	0.00130	0.94521	316.4	8.9	313.4	8.1	336	22	313.4	8.1	0.9	Single Age
12WPY18_39	519.00	2.86	0.54880	0.00620	0.06883	0.00061	0.53308	444.1	4.0	429.1	3.7	529	12	429.1	3.7	3.4	Single Age
12WPY18_40	210.00	6.90	0.42100	0.01300	0.05143	0.00067	0.59073	356.4	8.9	323.3	4.1	593	47	323.3	4.1	9.3	Single Age
12WPY18_41	183.00	0.94	0.89140	0.00980	0.10610	0.00120	0.55730	647.8	5.1	650.7	6.7	642	11	650.7	6.7	0.4	Single Age
12WPY18_42	683.00	8.04	0.41130	0.00870	0.05510	0.00110	0.84139	349.6	6.2	345.8	6.8	400	15	345.8	6.8	1.1	Single Age
12WPY18_43	92.10	0.78	0.91800	0.01300	0.10870	0.00120	0.35335	661.1	6.7	665.4	7.2	663	18	665.4	7.2	0.7	Single Age
12WPY18_44	583.00	84.00	0.38600	0.01500	0.05290	0.00150	0.95977	331.0	11.0	332.3	9.4	341	28	332.3	9.4	0.4	Single Age
12WPY18_45	210.00	1.62	0.71100	0.01700	0.08900	0.00150	0.86590	544.4	9.9	549.7	9.0	542	17	549.7	9.0	1.0	Single Age
12WPY18_46	97.40	1.77	6.21500	0.08500	0.36960	0.00470	0.85621	2006.0	12.0	2027.0	22.0	1978.1	9.3	1978.1	9.3	2.5	Single Age
12WPY18_47	114.00	1.13	0.75700	0.02400	0.09290	0.00230	0.85479	573.0	14.0	573.0	14.0	577	22	573.0	14.0	0.0	Single Age
12WPY18_48	750.00	1.45	0.73600	0.01100	0.08930	0.00140	0.87591	559.6	6.3	551.0	8.4	611.5	9.1	551.0	8.4	1.5	Single Age
12WPY18_49	96.60	1.40	0.72100	0.01200	0.08880	0.00110	0.41439	550.7	7.1	548.2	6.5	567	23	548.2	6.5	0.5	Single Age
12WPY18_50	575.00	9.10	0.52700	0.03000	0.06670	0.00330	0.98416	429.0	20.0	416.0	20.0	495	22	416.0	20.0	3.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY18_51	407.00	76.00	0.35680	0.00560	0.04927	0.00052	0.65558	309.7	4.2	310.0	3.2	330	17	310.0	3.2	0.1	Single Age
12WPY18_52	741.00	27.00	0.33400	0.02600	0.04480	0.00320	0.98866	297.0	21.0	282.0	20.0	434	29	282.0	20.0	5.1	Single Age
12WPY18_53	703.00	2.05	0.78650	0.00660	0.09581	0.00060	0.54346	589.1	3.8	589.8	3.5	596.3	8.1	589.8	3.5	0.1	Single Age
12WPY18_54	363.00	3.77	0.50300	0.01200	0.06480	0.00140	0.88192	412.9	7.9	404.5	8.6	462	14	404.5	8.6	2.0	Single Age
12WPY18_55	198.00	8.30	0.70600	0.04200	0.08710	0.00420	0.96572	539.0	25.0	538.0	25.0	544	28	538.0	25.0	0.2	Single Age
12WPY18_56	99.00	1.66	0.91800	0.01500	0.10870	0.00140	0.51930	660.7	8.1	664.9	8.0	647	14	664.9	8.0	0.6	Single Age
12WPY18_57	455.00	13.20	0.39010	0.00620	0.05107	0.00067	0.48849	334.3	4.5	321.1	4.1	434	19	321.1	4.1	3.9	Single Age
12WPY18_58	500.00	1.55	0.63400	0.02200	0.07790	0.00230	0.96130	497.0	13.0	483.0	14.0	571	13	483.0	14.0	2.8	Single Age
12WPY18_59	396.00	45.00	0.37200	0.01200	0.05120	0.00130	0.83746	322.4	8.8	321.8	8.1	333	21	321.8	8.1	0.2	Single Age
12WPY18_60	615.00	158.00	0.33980	0.00590	0.04758	0.00080	0.53457	296.9	4.5	299.7	4.9	295	23	299.7	4.9	0.9	Rim
12WPY18_60	271.00	0.80	0.81500	0.01600	0.09690	0.00160	0.65948	606.6	8.2	596.2	9.5	621	20	596.2	9.5	1.7	Core
12WPY18_61	558.40	122.00	0.34900	0.00700	0.04874	0.00067	0.37571	303.9	5.3	306.7	4.1	294	27	306.7	4.1	0.9	Rim
12WPY18_61	270.60	2.23	0.84600	0.01700	0.10080	0.00180	0.74189	622.4	9.1	619.0	10.0	625	20	619.0	10.0	0.5	Core
12WPY18_62	562.00	60.00	0.26930	0.00740	0.03677	0.00083	0.89269	241.9	5.9	232.8	5.1	347	15	232.8	5.1	3.8	Single Age
12WPY18_63	221.00	0.61	1.43700	0.06900	0.15130	0.00560	0.78162	906.0	29.0	907.0	32.0	921	21	907.0	32.0	0.1	Single Age
12WPY18_64	93.50	1.19	0.86700	0.01300	0.10590	0.00150	0.23729	633.6	7.2	648.9	8.8	595	24	648.9	8.8	2.4	Single Age
12WPY18_65	578.00	177.00	0.34350	0.00700	0.04709	0.00049	0.48494	299.7	5.2	296.6	3.0	331	22	296.6	3.0	1.0	Rim
12WPY18_65	57.60	0.72	0.86000	0.01800	0.10520	0.00190	0.39679	631.0	10.0	645.0	11.0	578	24	645.0	11.0	2.2	Core
12WPY18_66	379.00	2.68	0.81000	0.02400	0.09760	0.00280	0.94740	601.0	14.0	600.0	16.0	604	12	600.0	16.0	0.2	Single Age
12WPY18_67	357.00	119.00	0.35840	0.00430	0.04966	0.00042	0.38174	310.9	3.2	312.4	2.6	319	16	312.4	2.6	0.5	Single Age
12WPY18_68	343.00	2.65	0.67500	0.01000	0.08320	0.00110	0.71158	523.5	6.3	515.3	6.7	565	12	515.3	6.7	1.6	Single Age
12WPY18_69	244.00	3.41	0.82300	0.04200	0.09650	0.00410	0.96055	609.0	24.0	593.0	24.0	675	21	593.0	24.0	2.6	Single Age
12WPY18_70	238.00	0.80	4.20600	0.05500	0.24640	0.00370	0.70563	1674.0	11.0	1420.0	19.0	1999.2	9.1	1999.2	9.1	29.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY18_71	815.00	142.00	0.34700	0.00420	0.04772	0.00049	0.64059	302.4	3.2	300.5	3.0	311	11	300.5	3.0	0.6	Rim
12WPY18_71	754.00	0.70	0.73600	0.01100	0.08970	0.00140	0.73356	559.8	6.6	553.7	8.0	586	18	553.7	8.0	1.1	Core
12WPY18_72	322.00	1.46	0.80000	0.01100	0.09760	0.00120	0.78923	596.5	6.3	600.1	7.2	600	11	600.1	7.2	0.6	Single Age
12WPY18_73	607.00	22.90	0.36500	0.01200	0.05000	0.00120	0.90287	315.8	8.5	314.7	7.5	334	19	314.7	7.5	0.3	Single Age
12WPY18_74	614.00	102.00	0.39900	0.04600	0.04400	0.00270	0.97897	336.0	33.0	278.0	17.0	700	120	DISC	DISC	17.3	Rim
12WPY18_74	569.00	8.40	2.92900	0.07100	0.18110	0.00380	0.90751	1388.0	18.0	1073.0	20.0	1920	9	DISC	DISC	22.7	Core
12WPY18_75	759.00	31.80	0.35080	0.00950	0.04730	0.00120	0.69375	305.3	7.1	298.0	7.6	349	14	298.0	7.6	2.4	Rim
12WPY18_75	29.60	0.42	1.75800	0.03600	0.17960	0.00320	0.54549	1031.0	14.0	1065.0	17.0	971	26	1065.0	17.0	3.3	Core
12WPY18_76	384.00	1.24	0.72960	0.00630	0.08846	0.00095	0.46181	556.8	3.6	546.4	5.6	600	13	546.4	5.6	1.9	Single Age
12WPY18_77	412.00	3.43	0.86600	0.02500	0.10280	0.00240	0.86620	634.0	13.0	631.0	14.0	654	15	631.0	14.0	0.5	Single Age
12WPY18_78	287.00	0.73	0.81050	0.00840	0.09813	0.00099	0.52913	602.6	4.7	603.4	5.8	591	13	603.4	5.8	0.1	Single Age
12WPY18_79	654.00	41.00	0.30600	0.01500	0.04150	0.00170	0.98158	270.0	11.0	262.0	11.0	364	21	262.0	11.0	3.0	Single Age
12WPY18_80	100.70	0.45	0.80470	0.00980	0.09800	0.00100	0.17213	599.2	5.5	602.9	6.0	594	18	602.9	6.0	0.6	Single Age
12WPY18_81	622.00	111.00	0.35370	0.00760	0.04860	0.00120	0.78766	307.4	5.7	305.9	7.6	337	22	305.9	7.6	0.5	Rim
12WPY18_81	472.00	1.80	0.83670	0.00780	0.09959	0.00075	0.46618	617.2	4.3	612.0	4.4	628	11	612.0	4.4	0.8	Core
12WPY18_82	371.00	12.30	0.38600	0.00690	0.05290	0.00069	0.75825	331.2	5.0	332.3	4.2	334	13	332.3	4.2	0.3	Single Age
12WPY18_83	1616.00	26.50	0.27800	0.00350	0.03780	0.00049	0.85351	249.0	2.8	239.1	3.0	350.8	8.8	239.1	3.0	4.0	Single Age
12WPY18_84	804.00	113.00	0.33860	0.00430	0.04638	0.00047	0.80982	296.0	3.3	292.3	2.9	324	12	292.3	2.9	1.3	Single Age
12WPY18_85	361.00	145.10	0.34110	0.00450	0.04716	0.00044	0.45418	297.9	3.4	297.0	2.7	309	16	297.0	2.7	0.3	Single Age
12WPY18_86	587.00	139.00	0.37160	0.00660	0.05031	0.00080	0.81534	320.6	4.9	317.0	5.0	339	13	317.0	5.0	1.1	Single Age
12WPY18_87	528.00	1.86	0.75480	0.00620	0.09402	0.00087	0.62825	570.9	3.6	579.2	5.2	534	11	579.2	5.2	1.5	Single Age
12WPY18_88	268.00	1.93	3.58000	0.12000	0.22320	0.00540	0.92235	1546.0	25.0	1303.0	29.0	1885	22	DISC	DISC	30.9	Single Age
12WPY18_89	95.70	1.34	0.93100	0.01900	0.10990	0.00240	0.79368	667.0	10.0	672.0	14.0	647	15	672.0	14.0	0.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY18_90	469.00	17.40	0.60300	0.01200	0.07630	0.00110	0.84379	479.0	7.4	474.1	6.8	508	13	474.1	6.8	1.0	Single Age
12WPY18_91	40.80	0.75	4.98000	0.15000	0.29610	0.00640	0.88912	1823.0	27.0	1671.0	32.0	2007	21	2007.0	21.0	16.7	Single Age
12WPY18_92	457.00	9.70	0.40900	0.01200	0.05540	0.00140	0.85930	348.3	8.4	347.6	8.7	381	25	347.6	8.7	0.2	Rim
12WPY18_92	167.00	1.16	0.92800	0.01300	0.11140	0.00130	0.38465	666.3	7.0	680.7	7.5	611	26	680.7	7.5	2.2	Core
12WPY18_93	198.00	1.09	1.66100	0.01800	0.17130	0.00150	0.66416	994.2	7.2	1020.2	8.6	947	11	1020.2	8.6	2.6	Single Age
12WPY18_94	97.10	1.73	7.42000	0.35000	0.33700	0.01200	0.96270	2162.0	42.0	1871.0	56.0	2436	23	2436.0	23.0	23.2	Single Age
12WPY18_95	708.00	101.00	0.35340	0.00590	0.04846	0.00044	0.65016	307.2	4.4	305.1	2.7	325	19	305.1	2.7	0.7	Single Age
12WPY18_96	588.00	2.54	0.86480	0.00640	0.10339	0.00079	0.52076	632.6	3.5	634.2	4.6	624.2	8	634.2	4.6	0.3	Single Age
12WPY18_97	1040.00	22.20	0.34600	0.01200	0.04630	0.00130	0.85465	301.7	9.1	291.5	8.1	387	24	291.5	8.1	3.4	Rim
12WPY18_97	193.00	0.47	0.81570	0.00910	0.09760	0.00100	0.37690	605.5	5.1	600.3	6.1	614	11	600.3	6.1	0.9	Core
12WPY18_98	767.00	2.60	0.76920	0.00530	0.09397	0.00064	0.55509	579.3	3.0	578.9	3.8	578.7	8.2	578.9	3.8	0.1	Single Age
12WPY18_99	413.00	1.51	0.65500	0.01700	0.07890	0.00200	0.92675	511.0	10.0	491.0	12.0	608	11	491.0	12.0	3.9	Single Age
12WPY18_100	152.50	0.68	0.91500	0.01000	0.10840	0.00100	0.32191	659.5	5.4	663.2	5.9	653	13	663.2	5.9	0.6	Single Age
12WPY18_101	88.00	2.00	0.82900	0.02800	0.09920	0.00280	0.81551	611.0	16.0	609.0	17.0	616	27	609.0	17.0	0.3	Single Age
12WPY18_102	122.90	1.47	0.74800	0.01000	0.09072	0.00096	0.36357	566.8	5.9	559.8	5.7	604	19	559.8	5.7	1.2	Single Age
12WPY18_103	641.00	38.70	0.36690	0.00710	0.05000	0.00077	0.85408	317.1	5.2	315.1	4.9	345	13	315.1	4.9	0.6	Single Age
12WPY18_104	584.00	128.30	0.32530	0.00310	0.04481	0.00026	0.36094	286.2	2.4	282.6	1.6	296	13	282.6	1.6	1.3	Single Age
12WPY18_105	829.00	173.00	0.24900	0.00370	0.03475	0.00041	0.59607	225.7	3.0	220.2	2.6	280	17	220.2	2.6	2.4	Rim
12WPY18_105	184.00	0.69	0.66800	0.01400	0.08210	0.00140	0.58749	521.3	9.0	508.8	8.2	564	22	508.8	8.2	2.4	Core
12WPY18_106	41.60	1.06	0.87600	0.01900	0.10460	0.00200	0.39898	638.0	10.0	643.0	12.0	634	29	643.0	12.0	0.8	Single Age
12WPY18_107	437.00	6.10	0.78220	0.00750	0.09548	0.00085	0.77073	587.2	4.4	587.8	5.0	573.8	8.4	587.8	5.0	0.1	Single Age
12WPY18_108	100.00	9.40	0.63800	0.03800	0.08140	0.00410	0.87551	496.0	24.0	504.0	25.0	467	33	504.0	25.0	1.6	Single Age
12WPY18_109	298.10	1.41	0.74180	0.00710	0.09230	0.00095	0.23330	563.3	4.1	569.1	5.6	538	14	569.1	5.6	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY18_110	1260.00	65.90	0.27070	0.00780	0.03711	0.00092	0.81912	243.1	6.2	234.9	5.7	356	20	234.9	5.7	3.4	Single Age
12WPY18_111	762.00	41.00	0.36460	0.00640	0.04901	0.00070	0.81126	315.6	4.8	308.4	4.3	357	12	308.4	4.3	2.3	Single Age
12WPY18_112	680.00	103.00	0.35600	0.00720	0.04871	0.00096	0.42686	309.2	5.4	306.6	5.9	330	27	306.6	5.9	0.8	Single Age
12WPY18_113	497.00	109.00	0.36460	0.00700	0.04988	0.00076	0.76221	315.4	5.2	313.7	4.7	323	15	313.7	4.7	0.5	Single Age
12WPY18_114	607.00	91.00	0.34710	0.00560	0.04720	0.00055	0.35011	302.5	4.2	297.3	3.4	343	25	297.3	3.4	1.7	Single Age
12WPY18_115	628.00	6.33	0.51500	0.01100	0.06580	0.00100	0.86287	421.3	7.3	410.5	6.3	482	19	410.5	6.3	2.6	Single Age
12WPY18_116	492.00	150.00	0.36000	0.00820	0.04990	0.00110	0.86564	312.1	6.1	313.7	6.8	313	17	313.7	6.8	0.5	Rim
12WPY18_116	23.87	1.60	0.81300	0.04100	0.10720	0.00360	0.05384	603.0	23.0	657.0	21.0	451	85	657.0	21.0	9.0	Core
12WPY18_117	544.00	16.00	0.37500	0.01000	0.05010	0.00130	0.58511	322.9	7.8	315.2	7.8	390	19	315.2	7.8	2.4	Single Age
12WPY18_118	481.00	73.00	0.36140	0.00760	0.04752	0.00059	0.29460	313.2	5.7	299.3	3.6	416	32	299.3	3.6	4.4	Rim
12WPY18_118	840.90	5.83	0.78700	0.01600	0.09220	0.00140	0.67382	589.4	9.2	568.7	8.2	660	18	568.7	8.2	3.5	Core
12WPY18_119	651.00	37.00	0.38900	0.01200	0.05170	0.00130	0.95657	332.8	8.6	325.2	7.8	399	16	325.2	7.8	2.3	Single Age
12WPY18_120	178.00	0.88	0.79100	0.01600	0.09700	0.00140	0.65479	592.9	8.5	597.0	8.1	579	16	597.0	8.1	0.7	Single Age
12WPY48_1	130.70	1.70	1.58600	0.03900	0.15820	0.00360	0.54274	963.0	15.0	946.0	20.0	1011	43	946.0	20.0	1.8	Single Age
12WPY48_2	616.00	3.84	0.32490	0.00800	0.04470	0.00130	0.64764	285.3	6.1	282.0	7.8	283	50	282.0	7.8	1.2	Single Age
12WPY48_3	230.00	4.96	0.32640	0.00700	0.04565	0.00081	0.02482	286.5	5.4	287.7	5.0	282	58	287.7	5.0	0.4	Single Age
12WPY48_4	396.00	4.39	0.32660	0.00560	0.04543	0.00068	0.56333	286.8	4.3	286.4	4.2	268	37	286.4	4.2	0.1	Single Age
12WPY48_5	207.60	4.60	0.30770	0.00800	0.04236	0.00098	0.51365	272.1	6.2	267.4	6.0	296	53	267.4	6.0	1.7	Single Age
12WPY48_6	139.80	5.20	0.30630	0.00760	0.04312	0.00089	0.44285	271.7	6.0	272.1	5.5	249	51	272.1	5.5	0.1	Single Age
12WPY48_8	381.00	5.14	0.31950	0.00620	0.04208	0.00071	0.22273	282.1	4.6	265.7	4.4	394	47	265.7	4.4	5.8	Single Age
12WPY48_9	346.00	3.51	0.29840	0.00670	0.04233	0.00093	0.56954	264.9	5.2	267.2	5.8	235	47	267.2	5.8	0.9	Single Age
12WPY48_10	700.00	5.72	0.29530	0.00650	0.04093	0.00093	0.68590	262.5	5.1	259.4	5.6	298	40	259.4	5.6	1.2	Single Age
12WPY48_11	495.00	5.99	0.30600	0.01000	0.04260	0.00140	0.70161	270.3	7.7	269.0	8.8	250	58	269.0	8.8	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY48_12	400.00	5.16	0.30810	0.00630	0.04298	0.00082	0.64135	272.5	4.9	271.2	5.0	272	39	271.2	5.0	0.5	Single Age
12WPY48_13	471.00	4.00	0.32360	0.00730	0.04470	0.00081	0.63363	284.4	5.6	281.9	5.0	281	39	281.9	5.0	0.9	Single Age
12WPY48_14	234.00	8.39	0.31850	0.00590	0.04357	0.00071	0.16353	280.6	4.5	274.9	4.4	306	53	274.9	4.4	2.0	Single Age
12WPY48_15	250.00	3.30	0.34000	0.01100	0.04270	0.00110	0.40962	296.8	8.0	269.2	6.6	496	68	269.2	6.6	9.3	Single Age
12WPY48_16	328.00	2.25	0.42300	0.02300	0.04530	0.00140	0.38505	359.0	16.0	285.6	8.9	886	98	DISC	DISC	20.4	Single Age
12WPY48_17	41.30	0.84	0.43500	0.01300	0.05840	0.00110	0.12131	365.9	9.2	365.9	6.9	348	82	365.9	6.9	0.0	Single Age
12WPY48_18	235.00	2.01	0.75600	0.01200	0.09300	0.00150	0.62061	572.3	6.7	574.5	8.5	573	33	574.5	8.5	0.4	Single Age
12WPY48_19	319.00	6.67	0.32530	0.00540	0.04514	0.00084	0.55649	285.8	4.1	284.6	5.2	303	36	284.6	5.2	0.4	Single Age
12WPY48_20	360.00	11.40	0.33430	0.00620	0.04674	0.00092	0.52766	292.7	4.7	294.4	5.7	262	43	294.4	5.7	0.6	Single Age
12WPY48_21	600.00	11.20	0.31930	0.00770	0.04400	0.00120	0.61542	281.1	5.9	277.6	7.1	298	51	277.6	7.1	1.2	Single Age
12WPY48_22	582.00	10.13	0.31700	0.00820	0.04370	0.00120	0.63513	279.2	6.3	275.8	7.5	257	56	275.8	7.5	1.2	Single Age
12WPY48_23	80.50	3.14	0.30850	0.00970	0.04260	0.00077	0.19866	274.4	7.5	268.9	4.8	286	73	268.9	4.8	2.0	Single Age
12WPY48_24	212.00	5.10	0.31210	0.00710	0.04385	0.00086	0.51216	276.3	5.4	276.6	5.3	261	47	276.6	5.3	0.1	Single Age
12WPY48_25	360.00	6.77	0.32170	0.00840	0.04530	0.00110	0.60094	283.6	6.3	285.6	7.0	247	49	285.6	7.0	0.7	Single Age
12WPY48_26	741.00	14.29	0.31140	0.00620	0.04322	0.00087	0.59662	275.0	4.8	272.7	5.3	261	44	272.7	5.3	0.8	Single Age
12WPY48_27	416.00	0.70	1.64800	0.03700	0.16450	0.00450	0.68760	988.0	14.0	981.0	25.0	1003	43	981.0	25.0	0.7	Single Age
12WPY48_28	245.00	6.40	0.31350	0.00620	0.04360	0.00056	0.37712	276.7	4.8	275.1	3.5	318	43	275.1	3.5	0.6	Single Age
12WPY48_30	461.00	2.80	0.32120	0.00570	0.04513	0.00076	0.52640	282.7	4.4	284.5	4.7	265	35	284.5	4.7	0.6	Single Age
12WPY48_31	352.00	11.40	0.31370	0.00810	0.04380	0.00120	0.55956	276.7	6.3	276.2	7.6	239	56	276.2	7.6	0.2	Single Age
12WPY48_32	707.00	26.90	0.31070	0.00510	0.04312	0.00072	0.60242	274.5	3.9	272.1	4.4	298	33	272.1	4.4	0.9	Single Age
12WPY48_33	401.00	8.30	0.32070	0.00890	0.04420	0.00140	0.66152	282.0	6.9	278.8	8.8	260	59	278.8	8.8	1.1	Single Age
12WPY48_34	288.00	7.00	0.31750	0.00790	0.04481	0.00097	0.53742	279.6	6.1	282.5	6.0	277	55	282.5	6.0	1.0	Single Age
12WPY48_35	197.00	4.33	0.32150	0.00730	0.04490	0.00110	0.43526	282.8	5.6	283.2	6.7	274	53	283.2	6.7	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY48_36	611.00	5.14	0.33120	0.00550	0.04629	0.00078	0.59727	290.3	4.2	291.7	4.8	263	36	291.7	4.8	0.5	Single Age
12WPY48_37	391.00	10.79	0.30630	0.00720	0.04179	0.00088	0.62057	271.1	5.6	264.7	5.6	313	42	264.7	5.6	2.4	Single Age
12WPY48_38	498.00	3.60	0.30520	0.00530	0.04307	0.00077	0.60992	270.3	4.1	271.8	4.8	266	35	271.8	4.8	0.6	Single Age
12WPY48_39	370.00	7.26	0.31240	0.00710	0.04370	0.00100	0.58491	275.8	5.5	275.9	6.2	258	50	275.9	6.2	0.0	Single Age
12WPY48_40	335.00	5.77	0.32500	0.00780	0.04490	0.00120	0.67355	286.1	5.8	283.3	7.4	272	47	283.3	7.4	1.0	Single Age
12WPY48_41	284.00	5.86	0.30880	0.00820	0.04370	0.00130	0.60094	272.9	6.4	275.5	8.1	213	55	275.5	8.1	1.0	Single Age
12WPY48_42	1300.00	99.00	0.31230	0.00560	0.04324	0.00091	0.68147	275.7	4.3	272.9	5.6	292	37	272.9	5.6	1.0	Single Age
12WPY48_43	339.00	6.99	0.31030	0.00570	0.04255	0.00063	0.49465	274.3	4.4	268.6	3.9	323	41	268.6	3.9	2.1	Single Age
12WPY48_44	290.80	3.36	0.31530	0.00590	0.04344	0.00076	0.59497	278.1	4.6	274.1	4.7	294	40	274.1	4.7	1.4	Single Age
12WPY48_45	439.00	6.19	0.30710	0.00730	0.04240	0.00120	0.62757	271.6	5.6	267.9	7.5	270	55	267.9	7.5	1.4	Single Age
12WPY48_46	1520.00	30.00	0.32110	0.00650	0.04480	0.00110	0.74627	282.5	5.0	282.2	6.8	302	39	282.2	6.8	0.1	Single Age
12WPY48_47	671.00	5.91	0.32440	0.00460	0.04556	0.00072	0.53535	285.2	3.6	287.2	4.4	254	32	287.2	4.4	0.7	Single Age
12WPY48_48	308.00	31.00	0.92100	0.02800	0.10690	0.00390	0.74875	662.0	15.0	654.0	23.0	685	49	654.0	23.0	1.2	Rim
12WPY48_48	89.70	0.98	1.32800	0.02400	0.14210	0.00300	0.46311	858.0	11.0	856.0	17.0	877	42	856.0	17.0	0.2	Core
12WPY48_49	434.00	3.91	0.30030	0.00740	0.04110	0.00098	0.70570	266.3	5.7	259.6	6.0	292	41	259.6	6.0	2.5	Single Age
12WPY48_50	350.90	5.52	0.31870	0.00630	0.04405	0.00095	0.72490	280.7	4.9	277.8	5.9	301	39	277.8	5.9	1.0	Single Age
12WPY48_51	574.00	1.16	0.65400	0.01500	0.08170	0.00140	0.81041	511.3	9.1	506.4	8.5	544	29	506.4	8.5	1.0	Single Age
12WPY48_52	144.20	4.42	0.33100	0.00750	0.04607	0.00092	0.41269	290.0	5.7	290.3	5.7	276	55	290.3	5.7	0.1	Single Age
12WPY48_53	430.00	3.59	0.30420	0.00780	0.04310	0.00120	0.59013	270.9	5.8	271.7	7.3	226	53	271.7	7.3	0.3	Single Age
12WPY48_54	255.80	3.83	0.31700	0.00800	0.04360	0.00110	0.54364	279.3	6.2	275.3	6.9	316	56	275.3	6.9	1.4	Single Age
12WPY48_55	674.00	5.63	0.29860	0.00540	0.04131	0.00091	0.53640	265.1	4.2	260.9	5.6	291	48	260.9	5.6	1.6	Single Age
12WPY48_56	479.00	3.65	0.30100	0.00400	0.04185	0.00049	0.50977	267.1	3.1	264.3	3.0	289	34	264.3	3.0	1.0	Single Age
12WPY48_57	644.00	5.20	0.31840	0.00820	0.04370	0.00130	0.73455	280.3	6.3	276.5	7.8	284	48	276.5	7.8	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY48_58	684.00	16.50	0.32080	0.00540	0.04322	0.00079	0.52932	282.3	4.2	272.8	4.9	322	47	272.8	4.9	3.4	Single Age
12WPY48_59	467.00	6.14	0.33780	0.00670	0.04780	0.00110	0.52619	295.3	5.1	300.7	6.8	270	48	300.7	6.8	1.8	Single Age
12WPY48_60	245.00	4.36	0.30570	0.00720	0.04220	0.00093	0.45958	270.5	5.6	266.4	5.8	307	54	266.4	5.8	1.5	Single Age
12WPY48_61	585.00	4.52	0.30860	0.00650	0.04250	0.00120	0.64863	272.9	5.0	268.2	7.1	322	48	268.2	7.1	1.7	Single Age
12WPY48_62	556.00	5.54	0.31420	0.00620	0.04321	0.00093	0.61323	277.2	4.8	272.6	5.7	313	43	272.6	5.7	1.7	Single Age
12WPY48_63	283.50	5.54	0.32520	0.00850	0.04470	0.00120	0.73284	285.5	6.4	281.7	7.2	292	49	281.7	7.2	1.3	Single Age
12WPY48_64	270.30	4.98	0.32280	0.00800	0.04386	0.00078	0.50966	283.7	6.1	276.7	4.8	336	51	276.7	4.8	2.5	Single Age
12WPY48_65	379.00	13.80	0.32660	0.00690	0.04512	0.00094	0.51384	286.7	5.3	284.5	5.8	329	42	284.5	5.8	0.8	Single Age
12WPY48_66	286.50	3.91	0.29460	0.00520	0.04115	0.00078	0.45058	262.0	4.1	259.9	4.8	270	44	259.9	4.8	0.8	Single Age
12WPY48_67	237.00	3.39	0.36900	0.01700	0.04430	0.00150	0.15399	317.0	12.0	279.5	9.1	565	83	DISC	DISC	11.8	Single Age
12WPY48_68	388.00	4.68	0.30360	0.00480	0.04189	0.00054	0.35546	269.5	3.6	264.5	3.4	304	38	264.5	3.4	1.9	Single Age
12WPY48_69	226.00	5.10	0.30450	0.00550	0.04257	0.00068	0.49454	269.7	4.3	268.7	4.2	304	46	268.7	4.2	0.4	Single Age
12WPY48_70	323.00	4.71	0.32120	0.00850	0.04350	0.00120	0.54643	283.2	6.3	274.3	7.1	326	60	274.3	7.1	3.1	Single Age
12WPY48_71	693.00	6.38	0.30980	0.00500	0.04214	0.00092	0.62583	274.4	3.8	266.1	5.7	352	39	266.1	5.7	3.0	Single Age
12WPY48_72	180.00	4.71	0.73600	0.01900	0.08960	0.00210	0.29310	559.0	11.0	553.0	12.0	574	44	553.0	12.0	1.1	Single Age
12WPY48_73	431.00	5.46	0.31430	0.00760	0.04308	0.00091	0.69899	277.2	5.8	271.9	5.6	296	43	271.9	5.6	1.9	Single Age
12WPY48_74	211.00	5.46	0.32130	0.00600	0.04430	0.00086	0.40074	282.7	4.6	279.4	5.3	292	51	279.4	5.3	1.2	Single Age
12WPY48_75	298.00	4.74	0.31160	0.00650	0.04377	0.00093	0.62445	275.2	5.0	276.1	5.7	281	45	276.1	5.7	0.3	Single Age
12WPY48_76	415.00	5.08	0.32210	0.00630	0.04462	0.00090	0.61322	283.4	4.8	281.4	5.6	290	45	281.4	5.6	0.7	Rim
12WPY48_76	117.70	1.10	0.42100	0.01400	0.05630	0.00170	0.41235	356.6	9.9	353.0	11.0	376	79	353.0	11.0	1.0	Core
12WPY48_77	406.00	4.10	0.32150	0.00550	0.04444	0.00088	0.53952	282.9	4.3	280.2	5.4	290	44	280.2	5.4	1.0	Single Age
12WPY48_78	265.10	3.71	0.88100	0.01600	0.10380	0.00180	0.67866	641.7	8.8	636.0	11.0	643	27	636.0	11.0	0.9	Single Age
12WPY48_79	680.00	45.00	0.33240	0.00780	0.04620	0.00110	0.77846	291.9	6.0	291.2	6.5	298	37	291.2	6.5	0.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY48_80	159.00	6.29	0.31710	0.00720	0.04322	0.00092	0.34898	279.4	5.6	272.7	5.7	305	61	272.7	5.7	2.4	Single Age
12WPY48_81	285.00	9.35	0.31010	0.00450	0.04359	0.00044	0.45104	274.1	3.5	275.0	2.7	273	36	275.0	2.7	0.3	Single Age
12WPY48_82	490.00	5.04	0.31570	0.00580	0.04359	0.00086	0.68983	279.1	4.6	275.0	5.3	299	38	275.0	5.3	1.5	Single Age
12WPY48_83	305.00	3.67	0.30680	0.00730	0.04118	0.00062	0.37812	271.4	5.6	260.1	3.8	342	47	260.1	3.8	4.2	Single Age
12WPY48_84	406.00	10.38	0.33410	0.00570	0.04607	0.00087	0.53418	292.5	4.4	290.3	5.3	293	38	290.3	5.3	0.8	Single Age
12WPY48_85	211.00	4.22	0.31810	0.00800	0.04380	0.00120	0.44527	280.3	6.1	276.5	7.3	304	56	276.5	7.3	1.4	Single Age
12WPY48_86	303.00	3.06	0.30840	0.00740	0.04350	0.00100	0.66169	273.3	5.6	275.1	6.2	259	42	275.1	6.2	0.7	Single Age
12WPY48_87	320.00	18.30	0.34110	0.00710	0.04725	0.00079	0.19792	297.8	5.4	297.6	4.8	313	55	297.6	4.8	0.1	Single Age
12WPY48_88	337.00	4.85	0.30870	0.00740	0.04280	0.00100	0.66327	273.6	5.8	271.3	6.4	268	43	271.3	6.4	0.8	Single Age
12WPY48_89	1052.00	5.97	0.30490	0.00630	0.04145	0.00089	0.63428	270.0	4.9	261.8	5.5	310	44	261.8	5.5	3.0	Single Age
12WPY48_90	57.90	30.10	0.88400	0.04800	0.00886	0.00048	0.62799	644.0	26.0	56.9	3.1	4760	72	DISC	DISC	91.2	Single Age
12WPY48_91	467.70	5.78	0.31010	0.00810	0.04340	0.00130	0.71221	273.8	6.3	273.8	8.1	265	50	273.8	8.1	0.0	Single Age
12WPY48_92	650.00	9.57	0.31670	0.00670	0.04319	0.00097	0.69581	279.1	5.2	272.5	6.0	332	43	272.5	6.0	2.4	Single Age
12WPY48_93	500.00	3.77	0.32580	0.00510	0.04476	0.00057	0.60122	286.2	3.9	282.3	3.5	316	32	282.3	3.5	1.4	Single Age
12WPY48_94	263.10	4.83	0.31840	0.00710	0.04371	0.00096	0.53698	280.4	5.5	275.7	5.9	274	50	275.7	5.9	1.7	Single Age
12WPY48_95	170.00	5.30	0.33400	0.01500	0.04550	0.00160	0.47595	292.0	11.0	287.0	9.8	286	76	287.0	9.8	1.7	Single Age
12WPY48_96	532.00	3.89	0.32580	0.00690	0.04396	0.00092	0.62700	286.1	5.2	277.3	5.7	357	43	277.3	5.7	3.1	Single Age
12WPY48_97	304.80	7.24	0.31410	0.00610	0.04420	0.00094	0.54535	277.2	4.7	278.8	5.8	253	44	278.8	5.8	0.6	Single Age
12WPY48_98	290.10	11.72	0.29670	0.00660	0.04140	0.00100	0.66013	263.6	5.1	261.3	6.3	296	43	261.3	6.3	0.9	Single Age
12WPY48_99	674.00	3.88	0.31470	0.00530	0.04344	0.00066	0.65284	278.2	4.0	274.1	4.1	298	32	274.1	4.1	1.5	Single Age
12WPY48_100	159.10	5.54	0.31030	0.00640	0.04312	0.00073	0.50462	274.2	4.9	272.1	4.5	315	45	272.1	4.5	0.8	Single Age
12WPY48_101	56.50	5.17	0.43500	0.03700	0.00576	0.00040	0.18798	366.0	27.0	37.0	2.6	4450	140	DISC	DISC	89.9	Single Age
12WPY48_102	134.30	3.66	0.30080	0.00870	0.04099	0.00093	0.23157	266.8	6.8	258.9	5.7	350	70	258.9	5.7	3.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY48_103	210.00	4.34	0.29930	0.00690	0.03986	0.00084	0.64451	265.6	5.4	252.0	5.2	372	42	252.0	5.2	5.1	Single Age
12WPY48_104	1200.00	18.40	0.30560	0.00820	0.04230	0.00150	0.66545	271.1	6.5	266.8	9.3	269	60	266.8	9.3	1.6	Single Age
12WPY48_105	289.00	7.60	0.29950	0.00690	0.04210	0.00100	0.72433	266.5	5.5	266.0	6.4	286	41	266.0	6.4	0.2	Single Age
12WPY48_106	1850.00	5.23	0.27780	0.00460	0.03730	0.00086	0.83807	248.8	3.7	236.0	5.3	390	34	236.0	5.3	5.1	Single Age
12WPY48_107	339.80	3.02	0.31820	0.00540	0.04337	0.00062	0.32874	280.4	4.1	273.6	3.8	312	47	273.6	3.8	2.4	Single Age
12WPY48_108	324.00	0.20	0.57900	0.04000	0.04211	0.00091	0.35773	462.0	26.0	265.9	5.6	1580	120	DISC	DISC	42.4	Single Age
12WPY48_109	557.00	10.40	0.31470	0.00510	0.04410	0.00068	0.47152	277.7	3.9	278.2	4.2	280	37	278.2	4.2	0.2	Single Age
12WPY48_110	800.00	18.00	0.31540	0.00570	0.04344	0.00077	0.59464	278.1	4.4	274.1	4.8	303	33	274.1	4.8	1.4	Single Age
12WPY48_111	205.00	5.29	0.33850	0.00920	0.04390	0.00120	0.46382	296.5	7.1	276.6	7.5	436	63	276.6	7.5	6.7	Single Age
12WPY48_112	203.00	6.05	0.31680	0.00680	0.04373	0.00085	0.50858	279.2	5.2	275.9	5.2	291	46	275.9	5.2	1.2	Single Age
12WPY48_113	252.00	1.21	11.25000	0.29000	0.46300	0.01500	0.83217	2539.0	24.0	2445.0	66.0	2603	39	2603.0	39.0	6.1	Single Age
12WPY48_115	222.00	3.82	0.31500	0.01300	0.04140	0.00190	0.54497	277.0	10.0	262.0	12.0	355	77	262.0	12.0	5.4	Single Age
12WPY48_116	327.90	4.13	0.30260	0.00560	0.04182	0.00079	0.50053	268.2	4.4	264.0	4.9	286	47	264.0	4.9	1.6	Single Age
12WPY48_117	212.00	3.56	0.31810	0.00790	0.04310	0.00100	0.54101	280.1	6.1	272.2	6.4	347	54	272.2	6.4	2.8	Single Age
12WPY48_118	350.00	6.24	0.34080	0.00910	0.04860	0.00160	0.72709	297.3	6.9	305.7	9.7	215	51	305.7	9.7	2.8	Single Age
12WPY48_119	328.00	4.22	0.29530	0.00520	0.04131	0.00053	0.28990	262.6	4.1	261.0	3.3	292	45	261.0	3.3	0.6	Single Age
12WPY48_120	272.00	2.56	0.31980	0.00580	0.04306	0.00075	0.48726	281.6	4.4	271.7	4.7	357	44	271.7	4.7	3.5	Single Age
12WPY48_121	498.00	3.85	0.31520	0.00740	0.04363	0.00093	0.71636	278.0	5.7	275.3	5.7	307	43	275.3	5.7	1.0	Single Age
12WPY48_122	441.00	6.81	0.32370	0.00690	0.04402	0.00096	0.67852	284.5	5.3	277.6	5.9	338	38	277.6	5.9	2.4	Single Age
12WPY48_123	622.00	18.50	1.86300	0.03500	0.18580	0.00400	0.77630	1067.0	12.0	1098.0	22.0	996	27	1098.0	22.0	2.9	Single Age
12WPY48_124	290.00	3.91	0.32450	0.00820	0.04440	0.00120	0.47228	284.9	6.3	279.8	7.7	307	60	279.8	7.7	1.8	Single Age
13WPY05_1	505.00	48.00	0.44000	0.02800	0.04640	0.00110	0.24626	372.0	20.0	292.4	6.8	800	140	DISC	DISC	21.4	Single Age
13WPY05_2	293.50	3.92	0.66900	0.01600	0.08210	0.00180	0.90446	519.3	9.5	509.0	11.0	573	22	509.0	11.0	2.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_3	250.00	2.16	0.71150	0.00870	0.08920	0.00120	0.55976	545.5	5.1	550.9	6.9	524	30	550.9	6.9	1.0	Single Age
13WPY05_4	1090.00	28.50	0.38100	0.01800	0.05010	0.00240	0.61064	328.0	13.0	315.0	15.0	425	94	315.0	15.0	4.0	Rim
13WPY05_4	116.90	1.93	0.80800	0.01200	0.09750	0.00120	0.40986	601.2	6.6	599.6	7.1	598	36	599.6	7.1	0.3	Core
13WPY05_5	49.50	1.22	0.91200	0.02200	0.10610	0.00250	0.65003	659.0	12.0	650.0	14.0	698	43	650.0	14.0	1.4	Single Age
13WPY05_6	232.70	50.90	0.33810	0.00590	0.04715	0.00063	0.23129	295.6	4.4	297.0	3.9	289	40	297.0	3.9	0.5	Single Age
13WPY05_7	950.00	67.00	0.35000	0.01800	0.04710	0.00260	0.92737	304.0	14.0	296.0	16.0	336	39	296.0	16.0	2.6	Rim
13WPY05_7	195.50	1.64	0.88600	0.02500	0.10820	0.00310	0.72606	644.0	14.0	662.0	18.0	579	48	662.0	18.0	2.8	Core
13WPY05_8	118.50	1.31	7.79000	0.22000	0.27800	0.00640	0.92628	2206.0	24.0	1580.0	32.0	2848	17	DISC	DISC	44.5	Single Age
13WPY05_9	248.00	74.00	0.27900	0.01800	0.03850	0.00120	0.29338	250.0	14.0	243.5	7.6	280	140	243.5	7.6	2.6	Rim
13WPY05_9	651.00	1.56	0.64270	0.00860	0.07709	0.00095	0.82498	503.7	5.3	478.7	5.7	587	18	478.7	5.7	5.0	Core
13WPY05_10	328.00	13.20	0.30200	0.00730	0.04070	0.00110	0.79419	267.8	5.7	256.9	6.7	360	35	256.9	6.7	4.1	Rim
13WPY05_10	23.44	0.45	0.69000	0.02300	0.08510	0.00220	0.53004	532.0	14.0	526.0	13.0	530	82	526.0	13.0	1.1	Core
13WPY05_11	1072.00	25.14	0.36500	0.01300	0.04960	0.00130	0.68129	315.0	10.0	312.3	7.8	303	82	312.3	7.8	0.9	Rim
13WPY05_11	114.80	2.75	0.62700	0.01400	0.08030	0.00150	0.79946	494.0	8.7	497.6	9.0	484	27	497.6	9.0	0.7	Core
13WPY05_12	411.00	5.31	0.40800	0.01800	0.05240	0.00180	0.95911	346.0	13.0	329.0	11.0	432	29	329.0	11.0	4.9	Single Age
13WPY05_13	443.00	7.70	0.34820	0.00860	0.04580	0.00110	0.83723	302.9	6.5	288.4	7.0	378	28	288.4	7.0	4.8	Single Age
13WPY05_14	298.90	1.46	0.62500	0.01100	0.07700	0.00120	0.74234	493.1	6.7	478.1	7.1	555	25	478.1	7.1	3.0	Single Age
13WPY05_15	206.00	6.20	0.41560	0.00980	0.05530	0.00120	0.38092	352.8	7.0	347.1	7.1	381	58	347.1	7.1	1.6	Rim
13WPY05_15	223.10	0.62	0.81300	0.01400	0.09890	0.00170	0.59776	603.6	8.0	608.0	10.0	573	35	608.0	10.0	0.7	Core
13WPY05_16	693.00	3.93	0.48670	0.00750	0.06248	0.00086	0.90189	402.5	5.1	390.7	5.2	472	19	390.7	5.2	2.9	Single Age
13WPY05_17	41.70	0.92	0.89400	0.02000	0.10670	0.00250	0.46027	648.0	10.0	653.0	14.0	660	51	653.0	14.0	0.8	Single Age
13WPY05_19	414.00	0.63	0.78000	0.01200	0.09510	0.00140	0.73506	585.2	7.1	585.7	8.1	560	23	585.7	8.1	0.1	Single Age
13WPY05_20	202.00	2.73	0.71180	0.00980	0.08740	0.00100	0.59185	545.6	5.9	540.1	5.9	560	27	540.1	5.9	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_21	566.00	5.03	0.48800	0.01800	0.05850	0.00190	0.92827	402.0	12.0	366.0	12.0	578	28	366.0	12.0	9.0	Single Age
13WPY05_22	105.80	1.23	0.91300	0.01500	0.10230	0.00160	0.33921	658.2	7.8	627.7	9.6	767	41	627.7	9.6	4.6	Single Age
13WPY05_23	349.00	27.40	0.56400	0.02000	0.06620	0.00240	0.72025	454.0	13.0	413.0	14.0	623	56	413.0	14.0	9.0	Rim
13WPY05_23	199.70	6.07	1.22100	0.02100	0.13360	0.00230	0.80696	809.7	9.5	808.0	13.0	818	24	808.0	13.0	0.2	Core
13WPY05_24	231.00	2.23	0.51600	0.01200	0.06620	0.00190	0.68839	422.4	7.8	413.0	11.0	493	52	413.0	11.0	2.2	Rim
13WPY05_24	448.00	0.79	0.71600	0.01000	0.08720	0.00120	0.57277	548.4	6.1	538.8	7.2	588	28	538.8	7.2	1.8	Core
13WPY05_25	1230.00	45.00	0.34600	0.02400	0.04660	0.00320	0.97837	301.0	18.0	294.0	20.0	377	37	294.0	20.0	2.3	Rim
13WPY05_25	286.00	4.14	0.66100	0.01800	0.08250	0.00210	0.91623	514.0	11.0	511.0	13.0	521	25	511.0	13.0	0.6	Core
13WPY05_26	320.20	0.68	0.85240	0.00890	0.10330	0.00110	0.66140	625.8	4.9	633.6	6.3	612	19	633.6	6.3	1.2	Single Age
13WPY05_27	210.00	1.23	1.57000	0.12000	0.07700	0.00530	0.06302	947.0	44.0	477.0	31.0	2380	180	DISC	DISC	49.6	Single Age
13WPY05_28	382.00	4.99	0.71600	0.01900	0.08500	0.00150	0.78608	547.0	11.0	525.7	8.8	641	35	525.7	8.8	3.9	Single Age
13WPY05_30	363.00	136.00	0.37100	0.00770	0.05120	0.00100	0.69839	320.2	5.7	322.0	6.3	344	35	322.0	6.3	0.6	Rim
13WPY05_30	186.60	1.43	0.76100	0.01900	0.09460	0.00190	0.86386	574.0	11.0	582.0	11.0	559	37	582.0	11.0	1.4	Core
13WPY05_31	240.00	54.00	0.35230	0.00780	0.04860	0.00100	0.73411	306.2	5.9	305.6	6.3	339	32	305.6	6.3	0.2	Single Age
13WPY05_32	254.00	0.41	0.77700	0.01700	0.09600	0.00180	0.90389	584.7	9.3	591.0	11.0	581	21	591.0	11.0	1.1	Single Age
13WPY05_33	627.00	21.30	0.43600	0.01200	0.05600	0.00150	0.80251	366.9	8.3	351.4	9.2	472	41	351.4	9.2	4.2	Single Age
13WPY05_34	511.00	10.10	0.43200	0.01700	0.05860	0.00190	0.88115	364.0	12.0	367.0	12.0	402	47	367.0	12.0	0.8	Rim
13WPY05_34	146.80	1.86	0.76500	0.01800	0.09340	0.00180	0.64961	578.0	10.0	575.0	11.0	568	39	575.0	11.0	0.5	Core
13WPY05_35	223.00	22.80	0.42800	0.01500	0.05580	0.00160	0.61676	361.0	11.0	350.0	10.0	387	76	350.0	10.0	3.0	Rim
13WPY05_35	17.84	2.31	0.89000	0.04300	0.10820	0.00360	0.50210	647.0	24.0	662.0	21.0	607	91	662.0	21.0	2.3	Core
13WPY05_36	71.60	1.73	9.87000	0.14000	0.45050	0.00590	0.82110	2422.0	13.0	2397.0	26.0	2449	13	2449.0	13.0	2.1	Single Age
13WPY05_37	679.00	52.20	5.65000	0.12000	0.33300	0.00640	0.91833	1924.0	18.0	1852.0	31.0	1991	15	1991.0	15.0	7.0	Single Age
13WPY05_38	213.60	0.63	1.03100	0.01600	0.11900	0.00180	0.62641	720.1	7.8	725.0	10.0	709	28	725.0	10.0	0.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_39	19.30	0.92	1.49100	0.04400	0.14950	0.00380	0.65240	928.0	18.0	900.0	22.0	979	49	900.0	22.0	3.0	Single Age
13WPY05_40	295.00	1.60	0.81500	0.01000	0.09950	0.00120	0.76469	604.8	5.7	611.5	7.3	587	19	611.5	7.3	1.1	Single Age
13WPY05_41	211.00	73.40	0.35030	0.00970	0.04809	0.00089	0.61767	304.7	7.3	302.8	5.5	343	69	302.8	5.5	0.6	Single Age
13WPY05_42	359.00	1.29	0.80700	0.01500	0.09660	0.00170	0.88062	599.8	8.7	596.0	10.0	606	16	596.0	10.0	0.6	Single Age
13WPY05_43	408.00	16.40	0.35900	0.01100	0.04130	0.00150	0.05723	311.5	8.2	261.0	9.5	652	98	DISC	DISC	16.2	Rim
13WPY05_43	152.60	1.44	1.37800	0.02500	0.13650	0.00180	0.67739	879.0	11.0	825.0	10.0	965	31	825.0	10.0	6.1	Core
13WPY05_44	270.00	3.35	0.49000	0.01500	0.05560	0.00150	0.74672	404.0	10.0	348.7	9.1	731	53	DISC	DISC	13.7	Rim
13WPY05_44	102.10	0.76	0.78200	0.02500	0.08480	0.00220	0.72044	588.0	13.0	525.0	13.0	801	41	DISC	DISC	10.7	Core
13WPY05_45	175.00	0.41	5.17000	0.08300	0.31830	0.00500	0.84964	1846.0	14.0	1781.0	25.0	1894	17	1894.0	17.0	6.0	Single Age
13WPY05_46	354.00	155.00	0.34400	0.01600	0.04810	0.00350	0.53265	300.0	12.0	303.0	22.0	280	150	303.0	22.0	1.0	Rim
13WPY05_46	65.20	0.75	1.18700	0.02500	0.13200	0.00230	0.60628	794.0	12.0	799.0	13.0	776	40	799.0	13.0	0.6	Core
13WPY05_47	684.00	4.40	0.45590	0.00930	0.06040	0.00120	0.76756	381.3	6.5	378.2	7.2	407	28	378.2	7.2	0.8	Rim
13WPY05_47	218.20	1.04	0.70300	0.01200	0.08810	0.00140	0.50677	540.4	7.1	544.2	8.0	531	41	544.2	8.0	0.7	Core
13WPY05_48	314.00	8.00	0.63900	0.04400	0.07510	0.00450	0.91384	499.0	28.0	467.0	27.0	634	60	467.0	27.0	6.4	Rim
13WPY05_48	81.20	1.30	1.60800	0.03600	0.16130	0.00290	0.78955	973.0	14.0	964.0	16.0	1001	41	964.0	16.0	0.9	Core
13WPY05_49	538.00	1.57	0.95600	0.01900	0.10420	0.00180	0.88244	680.0	10.0	639.0	11.0	822	20	639.0	11.0	6.0	Single Age
13WPY05_50	647.00	1.46	0.75630	0.00780	0.09120	0.00110	0.70528	571.7	4.5	562.6	6.5	611	21	562.6	6.5	1.6	Single Age
13WPY05_51	299.20	100.00	0.35600	0.01700	0.04940	0.00170	0.13212	309.0	13.0	311.0	11.0	254	86	311.0	11.0	0.6	Rim
13WPY05_51	400.20	1.47	0.69700	0.01600	0.08620	0.00170	0.87572	536.6	9.4	533.0	10.0	560	24	533.0	10.0	0.7	Core
13WPY05_52	718.00	3.53	0.57900	0.02500	0.05550	0.00240	0.77402	462.0	16.0	348.0	15.0	1025	44	DISC	DISC	24.7	Single Age
13WPY05_53	576.00	5.68	0.39000	0.01300	0.04970	0.00160	0.84877	333.9	9.5	312.8	9.7	464	40	312.8	9.7	6.3	Rim
13WPY05_53	84.20	0.46	0.84000	0.01700	0.10080	0.00210	0.73031	618.5	9.6	619.0	12.0	586	42	619.0	12.0	0.1	Core
13WPY05_54	237.00	48.50	0.37400	0.01300	0.05000	0.00120	0.55762	323.0	10.0	314.3	7.1	375	65	314.3	7.1	2.7	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_54	282.00	1.14	1.25400	0.02200	0.13320	0.00220	0.75628	824.8	9.8	806.0	13.0	895	29	806.0	13.0	2.3	Core
13WPY05_55	490.00	64.00	0.30200	0.01800	0.04130	0.00240	0.74442	268.0	14.0	261.0	15.0	332	80	261.0	15.0	2.6	Rim
13WPY05_55	440.00	2.42	0.63100	0.00910	0.07580	0.00110	0.72519	496.5	5.7	471.1	6.9	576	23	471.1	6.9	5.1	Core
13WPY05_56	651.00	39.60	0.36400	0.01400	0.04420	0.00120	0.95718	316.0	11.0	278.6	7.7	581	34	DISC	DISC	11.8	Single Age
13WPY05_57	244.00	74.00	0.36020	0.00740	0.04978	0.00085	0.46716	312.1	5.5	313.2	5.2	327	44	313.2	5.2	0.4	Single Age
13WPY05_58	913.00	9.20	0.40900	0.02400	0.05460	0.00310	0.96219	348.0	17.0	342.0	19.0	377	34	342.0	19.0	1.7	Rim
13WPY05_58	246.00	1.03	0.89300	0.01300	0.10730	0.00160	0.85723	647.8	7.2	657.0	9.2	609	23	657.0	9.2	1.4	Core
13WPY05_59	387.00	44.70	0.37240	0.00800	0.05024	0.00098	0.66514	322.0	5.8	316.0	6.0	375	33	316.0	6.0	1.9	Single Age
13WPY05_60	25.50	1.13	19.83000	0.29000	0.61550	0.00860	0.83280	3082.0	14.0	3091.0	34.0	3068	11	3068.0	11.0	0.7	Single Age
13WPY05_61	165.00	0.54	0.91300	0.01100	0.10710	0.00095	0.44949	658.6	5.7	656.7	5.4	664	24	656.7	5.4	0.3	Single Age
13WPY05_62	139.00	1.33	1.36200	0.02400	0.13460	0.00210	0.68290	872.0	10.0	814.0	12.0	1011	27	814.0	12.0	6.7	Single Age
13WPY05_63	80.00	1.42	12.26000	0.22000	0.48650	0.00950	0.87961	2625.0	17.0	2554.0	41.0	2669	15	2669.0	15.0	4.3	Single Age
13WPY05_64	317.00	2.11	0.76300	0.01300	0.09300	0.00140	0.76065	575.5	7.8	573.5	8.4	565	24	573.5	8.4	0.3	Single Age
13WPY05_65	376.20	7.90	0.43600	0.01100	0.05750	0.00200	0.58669	367.2	7.9	361.0	12.0	381	67	361.0	12.0	1.7	Rim
13WPY05_65	137.10	1.83	0.59010	0.00860	0.07446	0.00087	0.39746	470.7	5.5	463.0	5.2	506	34	463.0	5.2	1.6	Core
13WPY05_66	315.00	2.30	0.53400	0.01500	0.06840	0.00150	0.71809	434.0	10.0	426.6	9.1	485	52	426.6	9.1	1.7	Rim
13WPY05_66	77.40	0.87	0.77600	0.02100	0.09590	0.00190	0.65434	582.0	12.0	592.0	10.0	527	43	592.0	10.0	1.7	Core
13WPY05_67	232.00	1.56	0.83900	0.01100	0.10220	0.00100	0.58795	618.4	5.8	627.5	5.9	579	23	627.5	5.9	1.5	Single Age
13WPY05_68	331.00	86.50	0.35030	0.00460	0.04833	0.00065	0.00883	304.8	3.4	304.2	4.0	288	29	304.2	4.0	0.2	Single Age
13WPY05_69	605.00	1.67	0.60900	0.04200	0.07520	0.00440	0.97642	488.0	25.0	467.0	27.0	555	36	467.0	27.0	4.3	Rim
13WPY05_69	222.70	1.01	0.91670	0.00860	0.10890	0.00110	0.52085	660.4	4.6	666.3	6.6	641	22	666.3	6.6	0.9	Core
13WPY05_70	333.00	3.21	5.79500	0.06000	0.34330	0.00400	0.76574	1945.0	8.9	1902.0	19.0	1989	14	1989.0	14.0	4.4	Single Age
13WPY05_71	475.00	2.51	0.55400	0.01700	0.07020	0.00150	0.91232	447.0	11.0	437.5	9.1	497	31	437.5	9.1	2.1	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_71	159.00	1.04	0.77800	0.01800	0.09580	0.00140	0.59159	584.0	10.0	589.5	8.0	555	38	589.5	8.0	0.9	Core
13WPY05_72	1281.00	17.00	0.49600	0.02200	0.06180	0.00310	0.93560	409.0	15.0	387.0	19.0	516	46	387.0	19.0	5.4	Rim
13WPY05_72	883.00	14.10	0.79700	0.01300	0.09250	0.00150	0.82247	594.5	7.2	570.3	8.8	673	18	570.3	8.8	4.1	Core
13WPY05_73	79.00	7.30	3.23000	0.28000	0.09820	0.00240	0.75859	1457.0	70.0	604.0	14.0	3080	140	DISC	DISC	58.5	Rim
13WPY05_73	441.00	0.35	5.69000	0.07800	0.33530	0.00460	0.59746	1929.0	12.0	1864.0	22.0	2002	24	2002.0	24.0	6.9	Core
13WPY05_74	231.00	1.18	0.88800	0.01300	0.10580	0.00120	0.88214	645.0	6.7	648.4	6.9	633	22	648.4	6.9	0.5	Single Age
13WPY05_75	89.40	1.07	10.01000	0.11000	0.45970	0.00540	0.85769	2435.0	10.0	2438.0	24.0	2438	11	2438.0	11.0	0.0	Single Age
13WPY05_76	1290.00	83.00	0.29160	0.00590	0.03938	0.00068	0.92338	260.6	4.4	249.0	4.2	338	20	249.0	4.2	4.5	Rim
13WPY05_76	77.50	0.87	0.90400	0.03100	0.10530	0.00320	0.52108	653.0	16.0	645.0	19.0	685	61	645.0	19.0	1.2	Core
13WPY05_77	175.60	0.55	1.57600	0.01900	0.16110	0.00170	0.67479	960.3	7.5	962.8	9.4	959	18	962.8	9.4	0.3	Single Age
13WPY05_78	682.00	7.83	3.05600	0.05900	0.19180	0.00350	0.81170	1423.0	14.0	1131.0	19.0	1914	18	DISC	DISC	20.5	Single Age
13WPY05_79	583.00	2.06	0.67000	0.01000	0.08390	0.00110	0.79976	520.0	6.3	519.3	6.3	532	20	519.3	6.3	0.1	Single Age
13WPY05_80	197.30	0.74	0.53960	0.00900	0.06783	0.00099	0.57865	437.9	5.9	423.0	6.0	482	34	423.0	6.0	3.4	Single Age
13WPY05_81	222.00	25.70	0.36200	0.01600	0.04890	0.00200	0.91875	312.0	12.0	309.0	13.0	328	38	309.0	13.0	1.0	Rim
13WPY05_81	72.10	0.85	0.72300	0.03200	0.08710	0.00370	0.56255	559.0	22.0	538.0	22.0	610	89	538.0	22.0	3.8	Core
13WPY05_82	860.00	70.00	0.30100	0.00850	0.03948	0.00093	0.78918	268.2	6.9	249.6	5.7	390	39	249.6	5.7	6.9	Single Age
13WPY05_83	739.00	2.85	0.53600	0.01800	0.06830	0.00210	0.79359	436.0	12.0	426.0	13.0	520	46	426.0	13.0	2.3	Rim
13WPY05_83	443.00	1.33	0.67710	0.00820	0.08452	0.00083	0.70779	524.8	5.0	523.0	4.9	537	21	523.0	4.9	0.3	Core
13WPY05_84	425.00	0.03	0.59500	0.01100	0.07310	0.00140	0.74156	473.5	7.1	455.0	8.4	547	26	455.0	8.4	3.9	Single Age
13WPY05_85	91.30	0.99	0.75700	0.01200	0.09420	0.00120	0.50782	572.1	7.1	580.5	7.3	543	39	580.5	7.3	1.5	Single Age
13WPY05_86	425.00	76.00	0.31170	0.00990	0.04210	0.00110	0.88290	275.1	7.7	265.8	6.6	323	34	265.8	6.6	3.4	Rim
13WPY05_86	290.00	2.05	0.48600	0.01600	0.06080	0.00200	0.87546	402.0	11.0	381.0	12.0	512	46	381.0	12.0	5.2	Core
13WPY05_87	67.90	0.98	5.52000	0.14000	0.33580	0.00900	0.85264	1901.0	22.0	1865.0	43.0	1946	29	1946.0	29.0	4.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_88	271.00	0.95	0.79500	0.01500	0.09700	0.00180	0.87303	593.6	8.8	597.0	11.0	594	21	597.0	11.0	0.6	Single Age
13WPY05_89	276.00	34.00	0.41300	0.02900	0.05130	0.00220	0.93592	349.0	21.0	323.0	14.0	508	73	323.0	14.0	7.4	Rim
13WPY05_89	55.00	0.67	3.96200	0.08800	0.26350	0.00550	0.70594	1629.0	17.0	1507.0	28.0	1752	30	1752.0	30.0	14.0	Core
13WPY05_91	265.30	106.40	0.36260	0.00960	0.04950	0.00120	0.89224	314.0	7.1	311.2	7.2	356	43	311.2	7.2	0.9	Rim
13WPY05_91	132.30	22.60	2.37000	0.15000	0.15930	0.00930	0.98548	1226.0	47.0	951.0	52.0	1769	21	DISC	DISC	22.4	Core
13WPY05_92	287.50	0.87	0.82700	0.01000	0.09890	0.00120	0.48869	611.6	5.8	608.1	6.9	618	29	608.1	6.9	0.6	Single Age
13WPY05_93	234.00	0.99	0.91600	0.01100	0.10900	0.00140	0.71427	659.9	6.0	666.8	7.9	632	21	666.8	7.9	1.0	Single Age
13WPY05_94	140.10	0.37	1.27000	0.01500	0.13630	0.00200	0.68735	832.1	6.9	824.0	11.0	852	22	824.0	11.0	1.0	Single Age
13WPY05_95	356.00	1.49	0.74400	0.01300	0.08840	0.00150	0.84195	565.6	8.0	546.3	8.8	627	21	546.3	8.8	3.4	Single Age
13WPY05_96	332.00	7.73	0.40900	0.01100	0.05600	0.00150	0.87889	347.6	8.0	351.4	9.1	334	39	351.4	9.1	1.1	Rim
13WPY05_96	33.70	1.12	0.68600	0.02200	0.08500	0.00260	0.54177	530.0	13.0	526.0	16.0	555	74	526.0	16.0	0.8	Core
13WPY05_97	410.00	8.48	0.37600	0.01300	0.05050	0.00110	0.34582	324.0	9.4	317.3	7.0	384	53	317.3	7.0	2.1	Rim
13WPY05_97	237.00	1.22	0.78400	0.01700	0.09050	0.00180	0.48538	587.2	9.8	558.0	10.0	651	46	558.0	10.0	5.0	Core
13WPY05_98	71.50	0.37	1.14800	0.01900	0.12740	0.00210	0.69138	777.1	9.5	773.0	12.0	781	30	773.0	12.0	0.5	Single Age
13WPY05_100	760.00	32.60	0.53300	0.04300	0.06300	0.00360	0.94978	433.0	28.0	394.0	22.0	660	62	394.0	22.0	9.0	Rim
13WPY05_100	38.99	1.56	10.90000	0.20000	0.46450	0.00900	0.49074	2514.0	17.0	2459.0	40.0	2543	33	2543.0	33.0	3.3	Core
13WPY05_101	788.00	14.60	1.77100	0.07600	0.12630	0.00290	0.94859	1034.0	28.0	767.0	17.0	1688	27	DISC	DISC	25.8	Rim
13WPY05_101	247.00	0.94	11.77000	0.11000	0.47560	0.00590	0.75327	2585.9	8.4	2508.0	26.0	2637	13	2637.0	13.0	4.9	Core
13WPY05_102	613.00	17.31	0.70000	0.01400	0.08560	0.00170	0.88183	539.4	8.3	531.0	10.0	571	20	531.0	10.0	1.6	Single Age
13WPY05_103	124.10	0.79	4.59000	0.12000	0.27400	0.00630	0.92250	1748.0	22.0	1560.0	32.0	1985	17	1985.0	17.0	21.4	Single Age
13WPY05_105	380.00	9.00	0.58800	0.04400	0.07450	0.00440	0.85981	466.0	29.0	463.0	27.0	496	57	463.0	27.0	0.6	Rim
13WPY05_105	154.40	0.72	2.04000	0.04300	0.19330	0.00360	0.72945	1128.0	14.0	1139.0	19.0	1120	30	1139.0	19.0	1.0	Core
13WPY05_106	389.90	9.62	4.29000	0.27000	0.21000	0.00980	0.97602	1674.0	51.0	1226.0	52.0	2285	28	DISC	DISC	46.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_107	403.00	6.36	0.38920	0.00560	0.05242	0.00074	0.61637	333.7	4.1	329.3	4.5	373	30	329.3	4.5	1.3	Rim
13WPY05_107	20.00	0.31	0.83800	0.04300	0.10070	0.00410	0.27774	617.0	23.0	618.0	24.0	610	110	618.0	24.0	0.2	Core
13WPY05_108	354.00	1.27	6.17000	0.11000	0.28930	0.00570	0.91053	1999.0	16.0	1637.0	29.0	2393	15	DISC	DISC	31.6	Single Age
13WPY05_109	532.00	12.50	0.75300	0.01000	0.09160	0.00120	0.46037	569.3	6.0	564.8	6.8	592	23	564.8	6.8	0.8	Single Age
13WPY05_110	532.00	9.80	0.89000	0.03100	0.09910	0.00360	0.95513	646.0	17.0	609.0	21.0	781	22	609.0	21.0	5.7	Rim
13WPY05_110	367.00	1.94	1.45700	0.02200	0.15060	0.00240	0.75543	912.5	9.0	904.0	14.0	948	23	904.0	14.0	0.9	Core
13WPY05_111	920.00	33.00	0.34300	0.03200	0.04550	0.00390	0.93015	298.0	24.0	287.0	24.0	353	66	287.0	24.0	3.7	Rim
13WPY05_111	150.00	0.51	0.87900	0.01500	0.10560	0.00170	0.59506	642.3	8.7	646.8	9.6	639	37	646.8	9.6	0.7	Core
13WPY05_112	612.00	2.87	0.62400	0.06000	0.07620	0.00400	0.88685	492.0	37.0	474.0	24.0	570	110	474.0	24.0	3.7	Rim
13WPY05_112	423.00	1.43	0.79620	0.00960	0.09870	0.00130	0.61959	594.5	5.4	606.7	7.4	568	23	606.7	7.4	2.1	Core
13WPY05_113	197.00	1.28	0.67200	0.01600	0.08110	0.00160	0.64744	521.0	9.9	502.7	9.7	583	29	502.7	9.7	3.5	Single Age
13WPY05_114	69.10	1.00	0.80400	0.01700	0.09870	0.00160	0.67377	599.9	9.2	606.6	9.5	604	37	606.6	9.5	1.1	Single Age
13WPY05_115	249.00	88.60	0.35780	0.00640	0.04915	0.00080	0.80320	310.4	4.7	309.3	4.9	334	25	309.3	4.9	0.4	Single Age
13WPY05_116	210.10	2.67	1.46600	0.03300	0.15240	0.00280	0.87233	915.0	14.0	914.0	16.0	936	21	914.0	16.0	0.1	Single Age
13WPY05_117	211.00	0.49	6.57000	0.10000	0.36760	0.00580	0.95597	2054.0	14.0	2017.0	27.0	2096	12	2096.0	12.0	3.8	Single Age
13WPY05_118	236.00	38.00	0.33800	0.02100	0.04420	0.00220	0.93860	294.0	16.0	279.0	14.0	382	45	279.0	14.0	5.1	Rim
13WPY05_118	120.10	0.61	0.73000	0.02200	0.08770	0.00160	0.68588	556.0	13.0	542.0	9.6	574	43	542.0	9.6	2.5	Core
13WPY05_119	402.00	21.00	0.32500	0.01200	0.04210	0.00140	0.62414	285.7	8.8	265.9	8.4	360	55	265.9	8.4	6.9	Rim
13WPY05_119	347.00	1.42	0.89200	0.01100	0.10750	0.00130	0.61946	647.2	5.8	658.1	7.6	608	25	658.1	7.6	1.7	Core
13WPY05_120	660.00	23.60	0.38800	0.02200	0.05260	0.00280	0.91259	333.0	16.0	330.0	17.0	409	59	330.0	17.0	0.9	Rim
13WPY05_120	98.00	2.02	0.71000	0.02000	0.08730	0.00210	0.79395	544.0	12.0	539.0	12.0	561	39	539.0	12.0	0.9	Core
13WPY05_121	430.00	14.20	1.00000	0.16000	0.08800	0.01500	0.78284	699.0	85.0	544.0	89.0	1250	210	DISC	DISC	22.2	Rim
13WPY05_121	120.20	1.00	13.16000	0.14000	0.52060	0.00480	0.72456	2691.0	10.0	2701.0	20.0	2684	13	2684.0	13.0	0.6	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY05_122	518.00	117.00	0.30300	0.00540	0.04138	0.00074	0.82974	268.6	4.2	261.3	4.6	301	23	261.3	4.6	2.7	Single Age
13WPY05_123	334.00	20.00	0.48200	0.06500	0.06230	0.00500	0.90605	398.0	44.0	390.0	30.0	430	140	390.0	30.0	2.0	Rim
13WPY05_123	158.70	1.57	1.14600	0.01800	0.13120	0.00180	0.69620	775.0	8.6	794.0	10.0	746	20	794.0	10.0	2.5	Core
13WPY05_124	127.40	1.49	0.93600	0.01300	0.11120	0.00110	0.39358	671.4	6.6	679.9	6.7	660	29	679.9	6.7	1.3	Single Age
13WPY07_1	1017.00	5.44	0.51600	0.01200	0.06370	0.00140	0.93219	421.9	8.3	397.9	8.4	547	20	397.9	8.4	5.7	Single Age
13WPY07_6	548.00	15.98	0.36600	0.01000	0.04830	0.00100	0.87813	316.0	7.7	304.0	6.3	400	29	304.0	6.3	3.8	Single Age
13WPY07_7	610.00	32.20	0.31210	0.00880	0.04180	0.00110	0.90227	275.6	6.8	263.9	7.0	338	28	263.9	7.0	4.2	Rim
13WPY07_7	39.30	2.09	0.81300	0.02700	0.10600	0.00420	0.67141	605.0	16.0	649.0	25.0	434	70	649.0	25.0	7.3	Core
13WPY07_9	351.00	5.28	0.51400	0.01200	0.06450	0.00130	0.89194	420.9	8.0	403.0	7.7	516	26	403.0	7.7	4.3	Rim
13WPY07_9	126.40	1.67	0.77900	0.01900	0.09400	0.00160	0.64227	584.0	11.0	578.8	9.4	593	42	578.8	9.4	0.9	Core
13WPY07_10	370.00	21.60	0.33620	0.00820	0.04629	0.00095	0.86367	293.9	6.2	291.7	5.8	317	24	291.7	5.8	0.7	Single Age
13WPY07_11	511.00	5.13	2.93100	0.07100	0.14100	0.00270	0.90085	1388.0	19.0	850.0	15.0	2350	18	DISC	DISC	38.8	Single Age
13WPY07_12	188.00	19.10	0.33260	0.00880	0.04530	0.00074	0.39364	291.4	6.7	285.6	4.6	344	62	285.6	4.6	2.0	Rim
13WPY07_12	554.00	17.74	0.62500	0.01700	0.07360	0.00200	0.84055	493.0	11.0	457.0	12.0	669	31	457.0	12.0	7.3	Core
13WPY07_13	600.00	6.67	1.01000	0.03500	0.10210	0.00320	0.96889	706.0	18.0	626.0	19.0	982	16	DISC	DISC	11.3	Single Age
13WPY07_14	245.00	3.16	2.15600	0.04000	0.15230	0.00260	0.86059	1166.0	13.0	914.0	14.0	1678	16	DISC	DISC	21.6	Single Age
13WPY07_15	350.00	16.13	0.34810	0.00440	0.04783	0.00040	0.46872	303.2	3.3	301.2	2.5	323	29	301.2	2.5	0.7	Single Age
13WPY07_16	213.40	5.60	0.99900	0.02900	0.07380	0.00100	0.57583	702.0	15.0	459.0	6.0	1578	42	DISC	DISC	34.6	Single Age
13WPY07_17	82.90	0.72	1.77700	0.07500	0.13640	0.00480	0.92851	1039.0	27.0	824.0	27.0	1537	29	DISC	DISC	20.7	Single Age
13WPY07_18	603.00	13.75	0.38470	0.00790	0.05075	0.00094	0.85755	330.9	5.7	319.1	5.8	421	21	319.1	5.8	3.6	Single Age
13WPY07_19	440.00	5.68	0.84700	0.01000	0.10030	0.00140	0.80395	622.5	5.5	615.9	8.1	647	17	615.9	8.1	1.1	Single Age
13WPY07_20	279.00	4.54	0.50900	0.01700	0.06030	0.00210	0.69838	418.0	11.0	378.0	13.0	598	53	378.0	13.0	9.6	Rim
13WPY07_20	557.00	1.41	0.89300	0.01100	0.09600	0.00110	0.83567	647.8	5.7	591.0	6.5	825	14	591.0	6.5	8.8	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY07_21	572.00	2.57	0.56190	0.00910	0.07020	0.00110	0.84682	452.4	5.9	437.2	6.6	526	19	437.2	6.6	3.4	Single Age
13WPY07_22	243.00	24.40	0.37900	0.01300	0.05070	0.00067	0.18730	325.9	9.5	318.8	4.1	391	69	318.8	4.1	2.2	Rim
13WPY07_22	357.00	2.84	0.68400	0.02800	0.08620	0.00300	0.93012	528.0	17.0	533.0	18.0	499	33	533.0	18.0	0.9	Core
13WPY07_23	255.00	1.65	0.69000	0.01500	0.07650	0.00130	0.76728	534.6	9.6	474.9	7.8	786	23	DISC	DISC	11.2	Single Age
13WPY07_24	688.00	14.50	0.34910	0.00650	0.04654	0.00057	0.64268	303.8	4.9	293.3	3.5	397	30	293.3	3.5	3.5	Single Age
13WPY07_25	239.00	19.72	0.36800	0.00800	0.05062	0.00093	0.40551	318.0	6.0	318.3	5.7	303	42	318.3	5.7	0.1	Single Age
13WPY07_26	310.00	8.50	0.52200	0.01000	0.05321	0.00058	0.65469	426.0	7.0	334.2	3.6	972	31	DISC	DISC	21.5	Single Age
13WPY07_27	127.00	1.02	1.29400	0.02300	0.13400	0.00230	0.76014	843.0	10.0	810.0	13.0	945	23	810.0	13.0	3.9	Single Age
13WPY07_28	346.00	8.90	0.37500	0.01600	0.04860	0.00180	0.67624	322.0	12.0	306.0	11.0	407	35	306.0	11.0	5.0	Single Age
13WPY07_29	530.00	11.50	0.42000	0.02200	0.05300	0.00200	0.94613	356.0	16.0	333.0	13.0	501	42	333.0	13.0	6.5	Rim
13WPY07_29	246.30	2.08	0.82100	0.02800	0.08940	0.00240	0.85543	607.0	16.0	552.0	14.0	815	30	552.0	14.0	9.1	Core
13WPY07_30	409.00	12.20	0.34250	0.00640	0.04664	0.00080	0.64377	299.0	4.9	293.8	5.0	328	31	293.8	5.0	1.7	Rim
13WPY07_30	130.00	2.64	0.46000	0.01200	0.06180	0.00150	0.68326	385.8	9.1	386.3	8.9	386	54	386.3	8.9	0.1	Core
13WPY07_31	293.00	1.94	1.21400	0.06200	0.11470	0.00330	0.89789	803.0	28.0	700.0	19.0	1104	53	DISC	DISC	12.8	Single Age
13WPY07_32	337.00	20.24	0.36520	0.00610	0.04745	0.00054	0.29091	315.9	4.5	298.8	3.3	446	40	298.8	3.3	5.4	Single Age
13WPY07_33	443.00	0.87	0.69700	0.01200	0.08633	0.00089	0.63409	539.3	5.6	533.8	5.3	574	20	533.8	5.3	1.0	Single Age
13WPY07_34	476.00	12.85	0.34690	0.00460	0.04749	0.00056	0.65573	302.3	3.5	299.1	3.4	328	23	299.1	3.4	1.1	Single Age
13WPY07_35	198.60	0.63	2.82000	0.04900	0.19980	0.00320	0.92538	1359.0	13.0	1174.0	17.0	1683	13	DISC	DISC	13.6	Single Age
13WPY07_36	295.00	9.10	0.44700	0.01100	0.05790	0.00130	0.36109	374.8	7.8	363.0	7.9	437	56	363.0	7.9	3.1	Rim
13WPY07_36	465.20	2.41	0.57660	0.00950	0.07160	0.00110	0.71969	462.1	6.1	445.5	6.5	549	22	445.5	6.5	3.6	Core
13WPY07_37	740.00	16.86	0.31690	0.00770	0.04196	0.00079	0.65172	279.3	5.9	265.0	4.9	353	43	265.0	4.9	5.1	Rim
13WPY07_37	307.00	6.30	0.65600	0.03600	0.06450	0.00180	0.90329	511.0	22.0	403.0	11.0	1002	60	DISC	DISC	21.1	Core
13WPY07_38	610.00	10.00	0.44000	0.01500	0.05520	0.00160	0.07808	370.0	11.0	346.4	9.8	474	72	346.4	9.8	6.4	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY07_38	639.00	1.38	0.60280	0.00860	0.07470	0.00110	0.78612	478.9	5.4	464.4	6.9	514	24	464.4	6.9	3.0	Core
13WPY07_39	1354.00	17.40	0.57900	0.02000	0.07080	0.00190	0.80872	463.0	13.0	441.0	11.0	595	54	441.0	11.0	4.8	Rim
13WPY07_39	256.30	0.87	5.70800	0.05800	0.31410	0.00240	0.78374	1934.1	8.4	1761.0	12.0	2113	12	2113.0	12.0	16.7	Core
13WPY07_40	904.00	2.71	0.53000	0.01400	0.06580	0.00160	0.94437	430.9	9.5	410.6	9.5	507	16	410.6	9.5	4.7	Single Age
13WPY07_41	259.40	2.93	1.75100	0.05600	0.09980	0.00220	0.84796	1025.0	21.0	613.0	13.0	2060	30	DISC	DISC	40.2	Single Age
13WPY07_42	324.00	2.13	0.58000	0.01200	0.07170	0.00120	0.85010	465.2	8.0	446.6	7.4	541	24	446.6	7.4	4.0	Single Age
13WPY07_43	286.20	22.39	0.31720	0.00640	0.04384	0.00053	0.26026	279.6	4.9	276.6	3.3	310	44	276.6	3.3	1.1	Single Age
13WPY07_44	691.00	2.67	4.49000	0.10000	0.22150	0.00280	0.85046	1727.0	19.0	1290.0	15.0	2327	22	DISC	DISC	44.6	Single Age
13WPY07_45	219.60	20.43	0.32110	0.00650	0.04424	0.00073	0.76064	282.5	5.0	279.0	4.5	338	33	279.0	4.5	1.2	Single Age
13WPY07_46	610.00	21.40	0.38900	0.02100	0.04727	0.00098	0.82030	332.0	15.0	297.7	6.1	579	79	DISC	DISC	10.3	Single Age
13WPY07_47	294.00	3.73	0.79000	0.03100	0.08590	0.00280	0.61985	589.0	18.0	531.0	17.0	840	23	531.0	17.0	9.8	Single Age
13WPY07_49	255.80	22.06	0.32400	0.01700	0.04463	0.00088	0.09080	285.0	13.0	281.4	5.4	290	110	281.4	5.4	1.3	Rim
13WPY07_49	204.00	2.42	0.85200	0.01500	0.10040	0.00140	0.69587	627.3	7.7	616.6	8.4	669	30	616.6	8.4	1.7	Core
13WPY07_50	517.00	13.20	0.37200	0.01200	0.04900	0.00110	0.83471	320.8	8.5	310.0	7.2	387	33	310.0	7.2	3.4	Single Age
13WPY07_51	1290.00	11.33	0.42300	0.01300	0.05370	0.00180	0.93526	358.2	9.1	337.0	11.0	505	21	337.0	11.0	5.9	Rim
13WPY07_51	416.00	4.26	0.77400	0.02800	0.09270	0.00260	0.95780	581.0	16.0	571.0	16.0	624	23	571.0	16.0	1.7	Core
13WPY07_52	112.00	1.12	1.61500	0.01800	0.16210	0.00180	0.67753	975.8	7.0	968.0	10.0	992	21	968.0	10.0	0.8	Single Age
13WPY07_53	75.60	0.90	0.95100	0.01400	0.11010	0.00170	0.23691	679.2	7.2	673.0	10.0	723	38	673.0	10.0	0.9	Single Age
13WPY07_55	301.00	0.59	1.14500	0.03100	0.11690	0.00200	0.64521	774.0	14.0	712.0	12.0	974	40	712.0	12.0	8.0	Rim
13WPY07_55	198.60	0.37	1.48200	0.02100	0.14850	0.00210	0.43854	924.8	9.2	893.0	12.0	982	33	893.0	12.0	3.4	Core
13WPY07_56	920.00	31.50	0.29620	0.00990	0.03940	0.00120	0.89885	263.3	7.7	249.3	7.3	353	31	249.3	7.3	5.3	Rim
13WPY07_56	378.00	5.32	0.76900	0.01300	0.08970	0.00120	0.79675	579.1	7.6	553.9	7.1	634	23	553.9	7.1	4.4	Core
13WPY07_57	360.70	1.20	0.94500	0.01600	0.10700	0.00200	0.79059	675.2	8.6	655.0	12.0	760	22	655.0	12.0	3.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY07_58	364.30	1.51	5.99000	0.26000	0.31400	0.01400	0.97937	1965.0	39.0	1766.0	66.0	2176	16	2176.0	16.0	18.8	Single Age
13WPY07_59	394.00	17.00	0.37500	0.01200	0.04980	0.00140	0.91172	323.0	8.7	313.3	8.8	436	25	313.3	8.8	3.0	Single Age
13WPY07_61	1380.00	33.20	0.38710	0.00360	0.05088	0.00053	0.56326	332.2	2.7	319.9	3.3	405	20	319.9	3.3	3.7	Single Age
13WPY07_63	432.00	18.90	0.33530	0.00940	0.04590	0.00110	0.90534	293.4	7.1	289.1	6.6	336	27	289.1	6.6	1.5	Single Age
13WPY07_64	448.40	1.76	3.89500	0.08100	0.17050	0.00250	0.92674	1611.0	17.0	1015.0	14.0	2510	17	DISC	DISC	37.0	Single Age
13WPY07_65	757.00	4.32	0.44200	0.01200	0.05560	0.00120	0.86895	370.8	8.2	348.7	7.6	502	30	348.7	7.6	6.0	Single Age
13WPY07_66	284.50	22.71	0.33100	0.01200	0.04493	0.00085	0.04803	289.8	9.3	283.3	5.3	336	77	283.3	5.3	2.2	Rim
13WPY07_66	415.40	4.03	2.39900	0.09500	0.12870	0.00420	0.97173	1238.0	28.0	780.0	24.0	2161	19	DISC	DISC	37.0	Core
13WPY07_67	1017.00	5.87	0.32800	0.00330	0.04411	0.00044	0.55953	288.0	2.5	278.2	2.7	366	20	278.2	2.7	3.4	Single Age
13WPY07_68	254.00	22.12	0.33560	0.00660	0.04562	0.00063	0.24713	293.7	5.0	287.6	3.9	339	49	287.6	3.9	2.1	Single Age
13WPY07_69	482.00	19.90	0.33470	0.00950	0.04518	0.00095	0.86092	292.7	7.2	284.8	5.8	371	30	284.8	5.8	2.7	Single Age
13WPY07_70	838.00	54.10	0.29760	0.00340	0.04165	0.00035	0.51425	264.4	2.7	263.1	2.1	269	23	263.1	2.1	0.5	Single Age
13WPY07_71	238.50	1.14	1.29900	0.01700	0.13150	0.00140	0.81470	844.8	7.4	796.5	8.2	976	17	796.5	8.2	5.7	Single Age
13WPY07_72	580.00	32.10	0.30570	0.00680	0.04080	0.00089	0.27413	270.7	5.3	257.8	5.5	330	45	257.8	5.5	4.8	Single Age
13WPY07_73	650.00	24.90	0.31630	0.00480	0.04374	0.00053	0.26200	279.0	3.7	276.0	3.3	321	36	276.0	3.3	1.1	Single Age
13WPY07_74	710.00	0.64	0.54990	0.00850	0.06903	0.00099	0.87080	444.6	5.6	430.3	6.0	524	16	430.3	6.0	3.2	Single Age
13WPY07_76	804.00	6.56	0.40000	0.02000	0.05210	0.00220	0.95637	341.0	14.0	327.0	13.0	402	29	327.0	13.0	4.1	Single Age
13WPY07_77	950.00	27.50	0.37400	0.01200	0.04800	0.00150	0.91971	322.3	9.0	302.3	9.1	447	31	302.3	9.1	6.2	Single Age
13WPY07_78	430.00	17.50	0.37600	0.01600	0.04820	0.00140	0.85253	323.0	12.0	303.3	8.3	462	43	303.3	8.3	6.1	Single Age
13WPY07_79	376.00	16.00	0.34400	0.00740	0.04573	0.00071	0.39006	300.0	5.6	288.2	4.4	379	36	288.2	4.4	3.9	Single Age
13WPY07_80	553.00	8.74	0.74400	0.01600	0.07340	0.00110	0.77509	564.5	9.7	456.4	6.8	1016	31	DISC	DISC	19.1	Single Age
13WPY07_81	257.00	88.80	1.09900	0.01900	0.12260	0.00160	0.56267	752.8	9.2	745.4	9.5	798	33	745.4	9.5	1.0	Rim
13WPY07_81	67.60	23.62	2.55400	0.04100	0.18020	0.00300	0.71569	1287.0	12.0	1068.0	16.0	1673	25	DISC	DISC	17.0	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY07_83	466.00	15.64	0.38040	0.00980	0.05120	0.00110	0.93538	326.9	7.3	321.5	6.6	365	22	321.5	6.6	1.7	Single Age
13WPY07_84	381.00	25.40	0.33700	0.01000	0.04590	0.00120	0.24787	294.5	7.6	289.6	7.4	319	53	289.6	7.4	1.7	Single Age
13WPY07_85	108.80	1.35	0.68200	0.02000	0.08470	0.00220	0.81585	527.0	12.0	524.0	13.0	539	37	524.0	13.0	0.6	Single Age
13WPY07_86	530.00	0.84	5.76000	0.15000	0.30400	0.00620	0.94396	1938.0	23.0	1716.0	32.0	2186	16	2186.0	16.0	21.5	Single Age
13WPY07_87	650.00	34.40	0.53930	0.00700	0.06599	0.00097	0.76611	438.4	4.7	411.9	5.9	576	22	411.9	5.9	6.0	Single Age
13WPY07_88	370.00	20.40	0.32340	0.00330	0.04514	0.00036	0.31356	284.5	2.5	284.6	2.2	291	26	284.6	2.2	0.0	Single Age
13WPY07_89	266.00	1.25	0.60900	0.01100	0.07830	0.00150	0.85602	482.7	6.9	485.6	8.7	502	23	485.6	8.7	0.6	Single Age
13WPY07_91	389.00	10.90	0.42200	0.01900	0.05020	0.00110	0.85880	358.0	13.0	315.7	6.7	639	58	DISC	DISC	11.8	Single Age
13WPY07_92	154.40	2.30	1.04100	0.01600	0.11610	0.00190	0.75219	724.3	8.0	708.0	11.0	766	25	708.0	11.0	2.3	Single Age
13WPY07_93	442.00	17.70	0.33810	0.00500	0.04640	0.00065	0.55660	295.7	3.8	292.4	4.0	336	31	292.4	4.0	1.1	Single Age
13WPY07_94	983.00	10.10	0.34600	0.01800	0.04450	0.00180	0.94197	301.0	13.0	283.0	12.0	410	40	283.0	12.0	6.0	Rim
13WPY07_94	505.00	1.40	0.58300	0.01200	0.07050	0.00100	0.84610	467.0	7.8	439.2	6.0	588	24	439.2	6.0	6.0	Core
13WPY07_95	271.00	0.89	0.81570	0.00810	0.09835	0.00095	0.70361	605.5	4.5	604.7	5.5	624	17	604.7	5.5	0.1	Single Age
13WPY07_96	521.00	9.00	0.36400	0.01100	0.04870	0.00130	0.84668	315.0	8.1	306.6	7.8	376	35	306.6	7.8	2.7	Rim
13WPY07_96	255.00	4.05	0.51100	0.01300	0.06760	0.00130	0.68619	418.8	8.8	421.7	7.6	427	39	421.7	7.6	0.7	Core
13WPY07_97	281.00	27.70	0.31960	0.00820	0.04445	0.00076	0.25573	281.5	6.3	280.4	4.7	279	65	280.4	4.7	0.4	Rim
13WPY07_97	415.00	6.41	1.89400	0.05900	0.12940	0.00360	0.92381	1077.0	21.0	784.0	21.0	1726	22	DISC	DISC	27.2	Core
13WPY07_98	201.00	0.60	0.63930	0.00990	0.07939	0.00074	0.45947	501.6	6.1	492.5	4.4	538	30	492.5	4.4	1.8	Single Age
13WPY07_100	510.00	20.40	0.30630	0.00690	0.04080	0.00110	0.27255	271.3	5.4	257.9	6.9	371	68	257.9	6.9	4.9	Single Age
13WPY07_102	424.00	15.00	0.38900	0.01300	0.04806	0.00093	0.82901	333.1	9.2	302.6	5.7	568	38	302.6	5.7	9.2	Single Age
13WPY07_103	370.00	1.63	1.67600	0.01700	0.15360	0.00170	0.76670	999.3	6.5	923.0	10.0	1170	15	923.0	10.0	7.6	Single Age
13WPY07_104	617.00	5.77	0.37100	0.01400	0.04690	0.00140	0.96048	320.0	10.0	295.2	8.4	473	22	295.2	8.4	7.8	Single Age
13WPY07_105	282.00	17.74	0.30600	0.00440	0.04220	0.00046	0.59483	271.0	3.4	266.4	2.8	315	32	266.4	2.8	1.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY07_106	289.00	17.00	0.30520	0.00810	0.04219	0.00060	0.54335	270.2	6.2	266.4	3.7	305	47	266.4	3.7	1.4	Single Age
13WPY07_107	197.00	16.64	0.34400	0.00730	0.04587	0.00063	0.09298	300.0	5.5	289.1	3.9	372	50	289.1	3.9	3.6	Single Age
13WPY07_108	392.00	20.00	0.42900	0.02400	0.05500	0.00220	0.96723	361.0	17.0	345.0	13.0	456	44	345.0	13.0	4.4	Single Age
13WPY07_109	523.00	4.79	0.40670	0.00760	0.04943	0.00068	0.74843	346.3	5.5	311.0	4.2	590	24	DISC	DISC	10.2	Single Age
13WPY07_110	394.00	7.10	0.64600	0.02900	0.06690	0.00220	0.73302	504.0	18.0	417.0	13.0	942	45	DISC	DISC	17.3	Single Age
13WPY07_111	579.00	6.50	1.41200	0.04800	0.09120	0.00290	0.94242	896.0	21.0	566.0	16.0	1845	26	DISC	DISC	36.8	Single Age
13WPY07_112	195.30	17.90	0.31370	0.00580	0.04277	0.00045	0.20682	276.9	4.5	270.0	2.8	364	43	270.0	2.8	2.5	Single Age
13WPY07_113	481.00	15.39	0.30940	0.00420	0.04147	0.00040	0.58384	273.7	3.2	261.9	2.5	344	24	261.9	2.5	4.3	Single Age
13WPY07_114	237.40	22.26	0.31920	0.00460	0.04380	0.00047	0.74382	282.0	3.9	276.3	2.9	323	34	276.3	2.9	2.0	Single Age
13WPY07_115	461.00	16.50	0.35400	0.01500	0.04396	0.00068	0.66521	307.0	11.0	277.3	4.2	546	66	277.3	4.2	9.7	Single Age
13WPY07_116	379.00	22.50	0.33260	0.00930	0.04576	0.00086	0.50385	291.5	7.1	288.5	5.3	329	50	288.5	5.3	1.0	Rim
13WPY07_116	120.20	1.08	1.06800	0.01800	0.11850	0.00140	0.64449	738.9	8.9	721.9	8.2	801	28	721.9	8.2	2.3	Core
13WPY07_117	620.00	18.30	0.33110	0.00730	0.04451	0.00065	0.67014	290.3	5.6	280.7	4.0	405	35	280.7	4.0	3.3	Single Age
13WPY07_118	357.00	1.56	1.43700	0.04000	0.14340	0.00390	0.95555	902.0	17.0	863.0	22.0	993	17	863.0	22.0	4.3	Single Age
13WPY07_119	449.00	8.97	0.51000	0.01500	0.05407	0.00067	0.79142	418.0	10.0	339.4	4.1	850	47	DISC	DISC	18.8	Single Age
13WPY07_120	308.00	2.88	0.70800	0.01100	0.08060	0.00110	0.80987	543.4	6.5	499.5	6.6	722	19	499.5	6.6	8.1	Single Age
13WPY07_121	215.30	0.95	0.70400	0.01600	0.08180	0.00100	0.40023	540.4	9.6	506.8	6.1	685	45	506.8	6.1	6.2	Single Age
13WPY07_122	308.00	8.30	0.37600	0.02300	0.05210	0.00390	0.52349	324.0	17.0	327.0	24.0	353	87	327.0	24.0	0.9	Rim
13WPY07_122	106.10	2.21	0.79200	0.01400	0.09390	0.00150	0.66254	592.0	7.9	578.5	8.6	632	31	578.5	8.6	2.3	Core
13WPY07_123	243.00	21.80	0.32320	0.00410	0.04458	0.00040	0.08412	284.3	3.1	281.1	2.5	304	33	281.1	2.5	1.1	Single Age
13WPY07_124	404.00	24.30	0.33500	0.01100	0.04541	0.00085	0.77298	293.1	8.3	286.3	5.3	360	85	286.3	5.3	2.3	Rim
13WPY07_124	130.40	1.82	9.78000	0.11000	0.39360	0.00420	0.46874	2414.0	10.0	2139.0	20.0	2645	20	2645.0	20.0	19.1	Core
13WPY07_125	151.90	0.56	0.77900	0.01000	0.09360	0.00110	0.53703	585.5	5.8	576.9	6.6	609	24	576.9	6.6	1.5	Single Age

Ordovician strata U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_1	284.00	0.99	0.88390	0.00830	0.10520	0.00110	0.77356	642.9	4.5	645.0	6.2	644	15	645.0	6.2	0.3	Single Age
12WPY05_2	169.30	0.49	6.29400	0.04000	0.36170	0.00280	0.58157	2017.3	5.6	1990.0	13.0	2050	11	2050.0	11.0	2.9	Single Age
12WPY05_3	368.50	1.13	1.83900	0.08200	0.14030	0.00400	0.92483	1052.0	29.0	845.0	23.0	1521	37	DISC	DISC	19.7	Single Age
12WPY05_4	96.00	1.00	9.16000	0.13000	0.39340	0.00570	0.84720	2355.0	14.0	2137.0	26.0	2568	14	2568.0	14.0	16.8	Single Age
12WPY05_5	733.00	1.68	0.67850	0.00450	0.08442	0.00067	0.51490	525.8	2.7	522.4	4.0	554	16	522.4	4.0	0.6	Single Age
12WPY05_6	482.00	4.20	10.45000	0.23000	0.46640	0.00640	0.87717	2477.0	20.0	2470.0	28.0	2484	21	2484.0	21.0	0.6	Single Age
12WPY05_8	227.60	1.13	1.27900	0.01700	0.13510	0.00210	0.81936	836.9	7.8	817.0	12.0	894	18	817.0	12.0	2.4	Single Age
12WPY05_9	279.90	0.80	7.03000	0.10000	0.37800	0.00550	0.92110	2117.0	13.0	2072.0	26.0	2160	9	2160.3	9.2	4.1	Single Age
12WPY05_10	218.00	2.80	8.61000	0.12000	0.42430	0.00640	0.85814	2298.0	12.0	2279.0	29.0	2320	11	2320.0	11.0	1.8	Single Age
12WPY05_11	622.00	31.00	0.92000	0.01800	0.10810	0.00290	0.81075	662.1	9.8	662.0	17.0	680	26	662.0	17.0	0.0	Rim
12WPY05_11	692.00	4.59	2.41800	0.09700	0.18410	0.00580	0.97185	1243.0	29.0	1088.0	32.0	1532	21	DISC	DISC	12.5	Core
12WPY05_12	419.10	6.74	0.75310	0.00740	0.09180	0.00100	0.79949	570.4	4.4	566.0	6.1	598	14	566.0	6.1	0.8	Single Age
12WPY05_13	114.80	0.46	0.86140	0.00950	0.10323	0.00096	0.41165	630.7	5.1	633.3	5.6	631	21	633.3	5.6	0.4	Single Age
12WPY05_14	243.70	1.58	11.74000	0.12000	0.47260	0.00530	0.78101	2584.6	9.9	2494.0	23.0	2664	12	2664.0	12.0	6.4	Single Age
12WPY05_15	745.00	11.30	0.85500	0.01200	0.09950	0.00110	0.65961	626.7	6.7	611.1	6.4	685	22	611.1	6.4	2.5	Single Age
12WPY05_16	39.10	1.22	1.73900	0.03100	0.17180	0.00250	0.29151	1022.0	11.0	1022.0	14.0	1000	29	1022.0	14.0	0.0	Single Age
12WPY05_17	133.80	0.66	0.91100	0.00760	0.10646	0.00084	0.38878	657.4	4.0	652.1	4.9	666	19	652.1	4.9	0.8	Single Age
12WPY05_18	387.00	27.50	0.69900	0.01100	0.08530	0.00130	0.42100	537.8	6.7	527.6	7.6	555	24	527.6	7.6	1.9	Single Age
12WPY05_45	103.60	1.02	1.01100	0.01300	0.11700	0.00170	0.80433	709.1	6.7	713.4	9.6	717	17	713.4	9.6	0.6	Single Age
12WPY05_46	1052.00	134.80	0.85500	0.00700	0.10051	0.00082	0.63670	627.3	3.8	617.4	4.8	664	15	617.4	4.8	1.6	Rim
12WPY05_46	670.00	20.40	1.45200	0.01800	0.12610	0.00140	0.44571	910.4	7.4	765.5	7.8	1268	25	DISC	DISC	15.9	Core
12WPY05_47	81.50	1.27	1.79300	0.01900	0.17720	0.00160	0.67339	1042.5	6.9	1051.3	9.0	1025	19	1051.3	9.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_48	435.10	0.93	0.78160	0.00960	0.09280	0.00100	0.33240	586.1	5.5	572.1	5.9	634	22	572.1	5.9	2.4	Single Age
12WPY05_49	430.00	1.08	4.91400	0.07900	0.32530	0.00560	0.96772	1803.0	14.0	1814.0	27.0	1772	14	1772.0	14.0	2.4	Single Age
12WPY05_50	257.00	12.45	0.84140	0.00720	0.10102	0.00094	0.67908	619.8	4.0	620.3	5.5	624	16	620.3	5.5	0.1	Single Age
12WPY05_51	124.70	0.56	0.67900	0.01000	0.08510	0.00120	0.03854	525.6	6.3	526.6	7.2	527	26	526.6	7.2	0.2	Single Age
12WPY05_52	29.40	0.78	1.59000	0.04600	0.15410	0.00390	0.75430	967.0	18.0	923.0	22.0	1036	34	923.0	22.0	4.6	Single Age
12WPY05_53	238.00	19.70	0.82200	0.04900	0.09980	0.00220	0.96560	608.0	27.0	613.0	13.0	590	100	613.0	13.0	0.8	Rim
12WPY05_53	140.00	0.71	4.72900	0.05900	0.28980	0.00390	0.88051	1772.0	11.0	1640.0	20.0	1935	14	1935.0	14.0	15.2	Core
12WPY05_54	324.00	5.32	0.98020	0.00770	0.11330	0.00100	0.66168	693.5	3.9	692.1	6.0	703	14	692.1	6.0	0.2	Single Age
12WPY05_55	193.00	2.97	0.93500	0.01700	0.10850	0.00220	0.74582	670.5	8.9	664.0	13.0	684	34	664.0	13.0	1.0	Single Age
12WPY05_56	70.20	0.36	1.59700	0.02000	0.15970	0.00180	0.42689	968.4	7.8	955.0	10.0	990	23	955.0	10.0	1.4	Single Age
12WPY05_57	179.00	0.63	0.89000	0.01800	0.10460	0.00210	0.84639	645.3	9.8	641.0	12.0	666	24	641.0	12.0	0.7	Single Age
12WPY05_58	94.10	24.20	0.91200	0.02000	0.10960	0.00200	0.23986	658.0	10.0	670.0	11.0	592	45	670.0	11.0	1.8	Rim
12WPY05_58	112.70	1.97	1.47200	0.02100	0.14990	0.00230	0.69209	918.4	8.5	900.0	13.0	955	26	900.0	13.0	2.0	Core
12WPY05_59	48.70	0.48	6.44300	0.04300	0.36280	0.00270	0.62529	2037.8	5.8	1995.0	13.0	2079	11	2079.0	11.0	4.0	Single Age
12WPY05_60	84.10	0.56	1.77300	0.01500	0.17670	0.00190	0.68812	1035.2	5.5	1049.0	10.0	1014	17	1049.0	10.0	1.3	Single Age
12WPY05_61	171.70	1.31	1.61100	0.01500	0.15770	0.00120	0.26546	974.3	6.0	943.7	6.9	1043	21	943.7	6.9	3.1	Single Age
12WPY05_62	445.00	1.29	10.38000	0.12000	0.43270	0.00580	0.72597	2468.0	11.0	2317.0	26.0	2602	14	2602.0	14.0	11.0	Single Age
12WPY05_63	676.00	1.60	1.09300	0.02700	0.10140	0.00240	0.55744	748.0	13.0	624.0	14.0	1137	47	DISC	DISC	16.6	Single Age
12WPY05_64	231.30	1.73	1.53200	0.01400	0.15280	0.00190	0.72793	942.9	5.6	918.0	11.0	1010	15	918.0	11.0	2.6	Single Age
12WPY05_65	212.00	0.89	6.00300	0.05500	0.35340	0.00400	0.74757	1975.7	7.9	1953.0	19.0	2013	14	2013.0	14.0	3.0	Single Age
12WPY05_66	247.20	2.39	0.83600	0.01200	0.09980	0.00130	0.46337	616.7	6.8	613.0	7.7	634	18	613.0	7.7	0.6	Single Age
12WPY05_67	153.00	1.09	1.31900	0.02300	0.13440	0.00210	0.56906	854.6	9.7	813.0	12.0	978	29	813.0	12.0	4.9	Single Age
12WPY05_68	190.90	0.85	1.72900	0.03100	0.16120	0.00170	0.20637	1018.0	11.0	964.7	9.7	1148	31	964.7	9.7	5.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_69	81.30	0.51	1.45200	0.03600	0.14770	0.00310	0.91496	911.0	14.0	888.0	17.0	963	21	888.0	17.0	2.5	Single Age
12WPY05_70	524.00	1.67	12.12000	0.19000	0.44840	0.00640	0.63760	2612.0	14.0	2387.0	29.0	2803	18	2803.0	18.0	14.8	Single Age
12WPY05_71	329.00	2.72	1.02900	0.03200	0.11380	0.00220	0.42735	718.0	16.0	694.0	13.0	809	54	694.0	13.0	3.3	Single Age
12WPY05_72	310.00	1.16	1.88000	0.01700	0.17790	0.00160	0.78439	1073.9	6.2	1055.1	9.0	1113	13	1055.1	9.0	1.8	Single Age
12WPY05_73	55.60	3.33	1.09600	0.03800	0.12050	0.00180	0.64014	749.0	18.0	734.0	10.0	804	57	734.0	10.0	2.0	Single Age
12WPY05_74	564.00	1.88	0.88600	0.01200	0.10460	0.00160	0.84056	643.8	6.3	641.4	9.4	676	17	641.4	9.4	0.4	Single Age
12WPY05_75	343.80	6.41	1.07500	0.02700	0.12110	0.00480	0.77738	741.0	13.0	737.0	27.0	790	55	737.0	27.0	0.5	Rim
12WPY05_75	336.60	1.26	1.39100	0.01900	0.14490	0.00170	0.83215	887.8	7.8	871.9	9.7	933	16	871.9	9.7	1.8	Core
12WPY05_76	399.00	10.58	0.79300	0.04600	0.09080	0.00310	0.82195	592.0	26.0	560.0	18.0	743	84	560.0	18.0	5.4	Rim
12WPY05_76	304.10	2.15	4.06000	0.13000	0.26800	0.00810	0.93583	1643.0	25.0	1529.0	41.0	1795	26	1795.0	26.0	14.8	Core
12WPY05_77	54.80	4.85	0.97500	0.05500	0.10740	0.00370	0.17358	690.0	28.0	658.0	21.0	828	78	658.0	21.0	4.6	Rim
12WPY05_77	300.00	1.85	1.71700	0.02700	0.16700	0.00290	0.87994	1017.0	10.0	995.0	16.0	1055	17	995.0	16.0	2.2	Core
12WPY05_78	202.00	0.44	5.14300	0.04600	0.32890	0.00350	0.73725	1842.8	7.5	1837.0	17.0	1868	13	1868.0	13.0	1.7	Single Age
12WPY05_79	197.00	2.70	1.00300	0.01600	0.11650	0.00150	0.84255	704.8	7.9	710.5	8.4	700	18	710.5	8.4	0.8	Single Age
12WPY05_80	568.00	13.00	0.84200	0.01300	0.09880	0.00180	0.70815	620.4	7.5	607.0	10.0	684	25	607.0	10.0	2.2	Single Age
12WPY05_81	919.00	37.00	0.84500	0.01900	0.09600	0.00200	0.76480	621.0	11.0	591.0	12.0	755	29	591.0	12.0	4.8	Rim
12WPY05_81	154.30	1.90	1.63500	0.02800	0.16620	0.00270	0.82440	983.0	11.0	991.0	15.0	958	21	991.0	15.0	0.8	Core
12WPY05_82	590.00	14.40	7.14000	0.13000	0.40550	0.00950	0.58509	2129.0	17.0	2194.0	44.0	2073	43	2073.0	43.0	5.8	Rim
12WPY05_82	152.80	0.87	18.06000	0.25000	0.60550	0.00970	0.80038	2995.0	13.0	3059.0	36.0	2953	17	2953.0	17.0	3.6	Core
12WPY05_83	148.80	0.44	1.22400	0.01600	0.13450	0.00150	0.27045	811.3	7.1	813.4	8.4	794	24	813.4	8.4	0.3	Single Age
12WPY05_84	225.20	3.95	0.91900	0.01200	0.10790	0.00120	0.61633	661.7	6.2	660.6	7.2	664	21	660.6	7.2	0.2	Single Age
12WPY05_85	1480.00	83.60	1.64300	0.01800	0.17190	0.00320	0.44669	986.7	7.0	1022.0	18.0	931	35	1022.0	18.0	3.6	Rim
12WPY05_85	205.00	2.19	2.66300	0.05600	0.23250	0.00360	0.81724	1321.0	16.0	1351.0	18.0	1281	26	1281.0	26.0	5.5	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_86	370.00	2.48	14.41000	0.54000	0.51140	0.00980	0.83754	2765.0	35.0	2660.0	42.0	2845	39	2845.0	39.0	6.5	Single Age
12WPY05_87	108.40	0.70	0.89670	0.00930	0.10850	0.00100	0.55068	649.8	5.0	663.9	6.0	602	21	663.9	6.0	2.2	Single Age
12WPY05_88	684.00	11.20	1.10400	0.05100	0.11280	0.00310	0.91704	759.0	26.0	692.0	19.0	976	47	692.0	19.0	8.8	Rim
12WPY05_88	77.30	0.68	5.07000	0.10000	0.32370	0.00460	0.83969	1830.0	17.0	1813.0	24.0	1851	23	1851.0	23.0	2.1	Core
12WPY05_89	252.00	0.53	0.80600	0.03600	0.08150	0.00280	0.64418	599.0	20.0	505.0	16.0	982	76	DISC	DISC	15.7	Rim
12WPY05_89	81.60	0.65	1.45000	0.01800	0.15170	0.00250	0.53229	909.5	7.5	911.0	14.0	907	29	911.0	14.0	0.2	Core
12WPY05_90	75.00	0.31	5.31000	0.04800	0.33510	0.00390	0.73374	1870.0	7.8	1863.0	19.0	1893	15	1893.0	15.0	1.6	Single Age
12WPY05_91	155.60	0.35	1.63900	0.02700	0.16050	0.00230	0.86216	984.0	10.0	959.0	13.0	1040	17	959.0	13.0	2.5	Single Age
12WPY05_92	205.00	1.28	0.88220	0.00730	0.10640	0.00110	0.61074	642.0	3.9	651.6	6.3	613	17	651.6	6.3	1.5	Single Age
12WPY05_93	224.00	0.96	1.40200	0.01600	0.14880	0.00160	0.84053	889.4	6.6	894.0	8.8	891	13	894.0	8.8	0.5	Single Age
12WPY05_94	283.20	1.42	1.39500	0.01300	0.14600	0.00150	0.64548	886.6	5.5	878.6	8.3	907	15	878.6	8.3	0.9	Single Age
12WPY05_95	261.00	0.86	0.84200	0.00570	0.10110	0.00081	0.47541	620.1	3.2	621.4	4.8	622	16	621.4	4.8	0.2	Single Age
12WPY05_96	147.50	0.60	5.78000	0.05400	0.34800	0.00360	0.70983	1942.8	8.1	1927.0	17.0	1966	13	1966.0	13.0	2.0	Single Age
12WPY05_97	230.00	0.79	6.59100	0.06300	0.38200	0.00430	0.81515	2057.5	8.4	2085.0	20.0	2034	10	2033.8	9.5	2.5	Single Age
12WPY05_98	339.40	72.00	0.90800	0.01500	0.10520	0.00190	0.77491	655.4	8.0	645.0	11.0	684	23	645.0	11.0	1.6	Single Age
12WPY05_99	133.10	0.94	1.74500	0.02000	0.16980	0.00200	0.72966	1026.0	7.4	1011.0	11.0	1063	18	1011.0	11.0	1.5	Single Age
12WPY05_100	154.00	1.52	1.39800	0.02400	0.14520	0.00200	0.83792	887.0	10.0	874.0	11.0	925	16	874.0	11.0	1.5	Single Age
12WPY05_101	248.00	2.03	3.27600	0.04100	0.22860	0.00270	0.52638	1474.8	9.8	1327.0	14.0	1707	25	1707.0	25.0	22.3	Single Age
12WPY05_102	37.60	0.83	0.92200	0.01700	0.10820	0.00150	0.26880	662.6	9.2	662.2	8.4	681	46	662.2	8.4	0.1	Single Age
12WPY05_103	317.00	1.83	1.27100	0.05700	0.12570	0.00220	0.26599	827.0	24.0	763.0	13.0	1008	84	763.0	13.0	7.7	Single Age
12WPY05_104	832.00	0.81	0.74730	0.00780	0.08950	0.00093	0.73388	566.5	4.5	552.6	5.5	637	16	552.6	5.5	2.5	Single Age
12WPY05_105	1438.00	2.64	1.03000	0.02500	0.08197	0.00087	0.34992	717.0	13.0	507.8	5.2	1469	40	DISC	DISC	29.2	Single Age
12WPY05_106	200.50	0.92	10.83000	0.11000	0.47750	0.00500	0.81487	2507.5	9.5	2516.0	22.0	2503	10	2503.4	9.8	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_107	790.00	12.36	0.79400	0.02400	0.09710	0.00270	0.86862	593.0	14.0	597.0	16.0	622	36	597.0	16.0	0.7	Rim
12WPY05_107	222.60	0.43	1.72600	0.02000	0.17050	0.00190	0.65956	1019.1	7.4	1015.0	11.0	1029	18	1015.0	11.0	0.4	Core
12WPY05_108	58.90	0.61	5.63500	0.06700	0.35230	0.00430	0.73859	1921.0	10.0	1945.0	20.0	1909	14	1909.0	14.0	1.9	Single Age
12WPY05_109	115.00	1.15	5.34800	0.08400	0.34220	0.00460	0.84532	1877.0	14.0	1897.0	22.0	1862	16	1862.0	16.0	1.9	Single Age
12WPY05_110	1479.00	1.86	7.46000	0.12000	0.37070	0.00440	0.86523	2168.0	14.0	2037.0	21.0	2290	13	2290.0	13.0	11.0	Single Age
12WPY05_111	94.30	0.91	1.01900	0.01100	0.11800	0.00130	0.56342	713.7	5.6	719.0	7.4	697	22	719.0	7.4	0.7	Single Age
12WPY05_112	538.00	4.09	0.67470	0.00710	0.08360	0.00100	0.77730	523.4	4.3	517.7	5.9	564	16	517.7	5.9	1.1	Single Age
12WPY05_113	598.00	1.19	0.72500	0.01300	0.08770	0.00160	0.85862	554.5	7.4	541.9	9.2	601	19	541.9	9.2	2.3	Single Age
12WPY05_114	254.80	0.66	1.46600	0.01600	0.14640	0.00100	0.53912	916.9	6.7	880.9	5.9	1001	19	880.9	5.9	3.9	Single Age
12WPY05_115	154.50	0.79	0.87900	0.01100	0.10450	0.00110	0.28659	640.4	5.7	640.5	6.6	643	22	640.5	6.6	0.0	Single Age
12WPY05_116	276.00	4.03	1.50500	0.01700	0.15660	0.00190	0.85260	931.8	6.7	938.0	10.0	923	12	938.0	10.0	0.7	Single Age
12WPY05_117	155.80	0.99	1.70700	0.01900	0.16660	0.00150	0.08923	1010.8	7.2	993.5	8.5	1038	20	993.5	8.5	1.7	Single Age
12WPY05_118	190.70	0.91	1.69200	0.01800	0.16970	0.00180	0.63173	1005.2	6.6	1010.0	10.0	1005	20	1010.0	10.0	0.5	Single Age
12WPY05_119	336.00	0.86	1.56100	0.02700	0.15340	0.00250	0.86927	954.0	10.0	920.0	14.0	1028	17	920.0	14.0	3.6	Single Age
12WPY05_120	670.00	2.20	0.89010	0.00870	0.10310	0.00100	0.79806	646.2	4.7	632.5	5.9	686	14	632.5	5.9	2.1	Single Age
12WPY05_121	141.90	1.39	1.20400	0.02000	0.13130	0.00210	0.82652	801.8	9.1	795.0	12.0	810	20	795.0	12.0	0.8	Single Age
12WPY05_122	225.00	3.90	3.27000	0.17000	0.19840	0.00640	0.92808	1467.0	39.0	1169.0	35.0	1900	48	DISC	DISC	20.3	Single Age
12WPY05_123	51.70	0.57	1.47100	0.02400	0.14830	0.00190	0.70671	919.2	9.9	893.0	11.0	989	23	893.0	11.0	2.9	Single Age
12WPY05_124	860.00	31.30	0.99500	0.05300	0.11290	0.00360	0.94438	700.0	26.0	689.0	21.0	732	49	689.0	21.0	1.6	Rim
12WPY05_124	80.40	1.46	7.35000	0.11000	0.39920	0.00500	0.79982	2153.0	13.0	2169.0	24.0	2138	17	2138.0	17.0	1.4	Core
12WPY05_125	169.60	1.38	6.70400	0.06200	0.38840	0.00380	0.81322	2073.7	8.5	2115.0	17.0	2030	12	2030.0	12.0	4.2	Single Age
12WPY05_126	235.00	0.54	1.70600	0.01900	0.16800	0.00240	0.75936	1010.5	7.0	1001.0	13.0	1040	23	1001.0	13.0	0.9	Single Age
12WPY05_127	320.00	1.23	1.02800	0.01600	0.11480	0.00190	0.79170	718.4	8.0	701.0	11.0	779	20	701.0	11.0	2.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_128	756.00	28.20	0.63800	0.02100	0.07760	0.00250	0.91551	501.0	13.0	482.0	15.0	615	35	482.0	15.0	3.8	Rim
12WPY05_128	101.00	1.41	1.04600	0.01600	0.12280	0.00140	0.40310	728.4	6.9	746.4	8.3	682	25	746.4	8.3	2.5	Core
12WPY05_129	796.30	1.04	0.61890	0.00730	0.07450	0.00100	0.81522	489.0	4.5	463.7	6.0	642	18	463.7	6.0	5.2	Single Age
12WPY05_130	118.90	0.85	2.03700	0.01700	0.19630	0.00150	0.41135	1127.5	5.8	1155.2	8.2	1089	18	1155.2	8.2	2.5	Single Age
12WPY05_131	187.00	0.61	10.64000	0.12000	0.43090	0.00570	0.80391	2493.0	10.0	2309.0	26.0	2662	14	2662.0	14.0	13.3	Single Age
12WPY05_132	918.00	81.30	0.71900	0.01400	0.08290	0.00240	0.64928	550.6	8.3	513.0	14.0	733	45	513.0	14.0	6.8	Single Age
12WPY05_133	102.30	85.00	0.71570	0.00780	0.08693	0.00074	0.33222	547.9	4.6	537.3	4.4	615	24	537.3	4.4	1.9	Single Age
12WPY05_134	131.10	2.49	1.41800	0.01500	0.15000	0.00190	0.73782	897.1	6.4	902.0	11.0	890	19	902.0	11.0	0.5	Single Age
12WPY05_135	102.20	0.66	1.70200	0.02000	0.16880	0.00180	0.28960	1008.8	7.6	1005.6	9.7	1022	23	1005.6	9.7	0.3	Single Age
12WPY05_136	187.00	1.26	0.83500	0.01800	0.10030	0.00180	0.77853	616.0	10.0	616.0	11.0	636	28	616.0	11.0	0.0	Single Age
12WPY05_137	299.00	5.03	1.07200	0.02900	0.06470	0.00160	0.29345	739.0	14.0	403.9	9.7	700	45	DISC	DISC	45.3	Rim
12WPY05_137	148.60	1.74	1.78000	0.03600	0.10520	0.00220	0.69711	1037.0	13.0	645.0	13.0	764	30	DISC	DISC	37.8	Core
12WPY05_138	334.00	1.80	1.80400	0.04500	0.16240	0.00250	0.73692	1047.0	16.0	970.0	14.0	1228	33	970.0	14.0	7.4	Single Age
12WPY05_139	339.80	0.74	1.39400	0.02400	0.13970	0.00270	0.82391	886.0	10.0	843.0	15.0	1004	24	843.0	15.0	4.9	Single Age
12WPY05_140	83.90	0.89	0.85300	0.01200	0.10280	0.00140	0.56571	625.7	6.7	631.9	8.4	615	30	631.9	8.4	1.0	Single Age
12WPY05_141	217.00	0.65	6.74700	0.05600	0.38120	0.00350	0.37203	2078.3	7.4	2082.0	16.0	2089	13	2089.0	13.0	0.3	Single Age
12WPY05_142	1061.00	5.00	0.64720	0.00750	0.07930	0.00110	0.88882	506.6	4.6	491.7	6.4	609	14	491.7	6.4	2.9	Single Age
12WPY05_143	177.00	1.05	1.51000	0.02800	0.15610	0.00290	0.93934	933.0	12.0	938.0	15.0	929	22	938.0	15.0	0.5	Single Age
12WPY05_144	521.00	150.80	0.78900	0.03800	0.09320	0.00670	0.85444	590.0	22.0	574.0	39.0	678	85	574.0	39.0	2.7	Rim
12WPY05_144	297.00	4.70	6.42000	0.18000	0.29790	0.00790	0.95697	2035.0	25.0	1679.0	40.0	2424	13	DISC	DISC	30.7	Core
12WPY05_145	432.00	0.71	0.98800	0.02100	0.06240	0.00140	0.89431	697.0	11.0	390.1	8.4	628	18	DISC	DISC	44.0	Single Age
12WPY05_146	728.00	1.49	0.93100	0.02500	0.10540	0.00290	0.95202	666.0	13.0	645.0	17.0	755	15	645.0	17.0	3.2	Single Age
12WPY05_147	131.30	3.65	4.86100	0.08500	0.30490	0.00460	0.87875	1793.0	15.0	1715.0	23.0	1890	14	1890.0	14.0	9.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY05_148	27.80	0.27	1.55100	0.04000	0.15120	0.00260	0.47322	949.0	16.0	908.0	15.0	1029	46	908.0	15.0	4.3	Single Age
12WPY05_149	57.60	0.85	1.90000	0.22000	0.14170	0.00470	0.68334	1059.0	70.0	854.0	26.0	1570	180	DISC	DISC	19.4	Single Age
12WPY05_150	133.20	5.25	1.00500	0.01200	0.11550	0.00150	0.64307	706.0	5.9	704.3	8.5	701	20	704.3	8.5	0.2	Single Age
12WPY31_1	52.30	1.02	1.74100	0.02200	0.17150	0.00210	0.46660	1024.2	8.4	1020.0	12.0	1042	27	1020.0	12.0	0.4	Single Age
12WPY31_2	23.00	0.87	2.29800	0.04900	0.20590	0.00500	0.51133	1211.0	15.0	1206.0	27.0	1232	46	1232.0	46.0	2.1	Single Age
12WPY31_3	120.00	1.66	0.94500	0.01900	0.10950	0.00150	0.54261	676.0	10.0	669.8	9.0	664	33	669.8	9.0	0.9	Single Age
12WPY31_4	374.80	1.95	5.36000	0.08700	0.32850	0.00520	0.93326	1878.0	14.0	1830.0	25.0	1929	10	1929.0	10.0	5.1	Single Age
12WPY31_5	169.40	0.45	1.64100	0.01500	0.16500	0.00120	0.52036	986.4	6.0	984.4	6.5	990	17	984.4	6.5	0.2	Single Age
12WPY31_6	266.60	1.76	5.59000	0.15000	0.26890	0.00560	0.95144	1912.0	23.0	1534.0	29.0	2382	19	DISC	DISC	35.6	Single Age
12WPY31_7	197.40	0.61	1.80700	0.02200	0.16640	0.00130	0.45004	1047.4	7.9	992.3	7.0	1161	22	992.3	7.0	5.3	Single Age
12WPY31_8	308.00	1.18	0.87100	0.01100	0.10433	0.00085	0.57861	635.6	5.7	639.7	5.0	615	24	639.7	5.0	0.6	Single Age
12WPY31_9	193.40	4.29	1.19900	0.01400	0.12890	0.00120	0.39641	800.7	6.4	781.5	7.1	859	24	781.5	7.1	2.4	Single Age
12WPY31_10	403.00	3.25	0.99200	0.01500	0.11590	0.00160	0.77839	699.5	7.5	707.0	9.5	672	20	707.0	9.5	1.1	Single Age
12WPY31_11	527.00	2.98	0.86800	0.00740	0.10254	0.00062	0.39611	634.3	4.0	629.2	3.6	658	18	629.2	3.6	0.8	Single Age
12WPY31_12	41.60	0.46	1.84000	0.11000	0.15280	0.00510	0.68449	1049.0	37.0	916.0	28.0	1317	77	DISC	DISC	12.7	Single Age
12WPY31_13	76.20	1.34	0.92600	0.01400	0.11120	0.00120	0.11184	665.8	7.6	679.7	7.1	633	37	679.7	7.1	2.1	Single Age
12WPY31_14	484.00	0.49	0.91110	0.00890	0.10800	0.00110	0.77791	657.4	4.7	661.0	6.1	658	13	661.0	6.1	0.5	Single Age
12WPY31_15	1364.00	2.55	0.91400	0.01800	0.10020	0.00130	0.73371	658.5	9.4	615.5	7.8	824	21	615.5	7.8	6.5	Rim
12WPY31_15	766.00	4.47	1.25000	0.01100	0.12980	0.00140	0.59191	823.4	5.0	786.8	7.8	911	19	786.8	7.8	4.4	Core
12WPY31_16	235.70	46.50	0.87800	0.01800	0.10390	0.00150	0.19669	639.5	9.5	637.0	9.0	680	48	637.0	9.0	0.4	Rim
12WPY31_16	361.00	8.70	5.15000	0.14000	0.32170	0.00730	0.96819	1841.0	24.0	1797.0	36.0	1891	14	1891.0	14.0	5.0	Core
12WPY31_17	57.30	1.18	1.91900	0.03100	0.18320	0.00210	0.31472	1087.0	11.0	1086.0	12.0	1090	34	1086.0	12.0	0.1	Single Age
12WPY31_18	60.50	0.74	3.11000	0.12000	0.21660	0.00600	0.91206	1427.0	29.0	1262.0	32.0	1696	29	1696.0	29.0	25.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY31_19	456.00	3.65	0.90920	0.00880	0.10766	0.00099	0.67112	656.4	4.7	659.1	5.8	644	17	659.1	5.8	0.4	Single Age
12WPY31_20	236.00	1.52	1.40500	0.01600	0.14920	0.00160	0.53928	890.5	6.9	896.4	9.1	877	19	896.4	9.1	0.7	Single Age
12WPY31_21	123.80	1.02	12.67000	0.27000	0.48060	0.00730	0.74602	2653.0	20.0	2529.0	32.0	2737	24	2737.0	24.0	7.6	Single Age
12WPY31_22	33.30	1.39	1.23600	0.07800	0.14030	0.00730	0.75003	818.0	37.0	844.0	41.0	742	60	844.0	41.0	3.2	Single Age
12WPY31_23	606.00	6.00	0.85200	0.01200	0.09830	0.00170	0.86169	625.5	6.5	604.5	9.7	715	16	604.5	9.7	3.4	Single Age
12WPY31_24	131.00	1.09	7.24500	0.08200	0.39500	0.00360	0.88644	2141.0	10.0	2146.0	17.0	2122	14	2122.0	14.0	1.1	Single Age
12WPY31_25	487.00	1.62	5.56000	0.30000	0.30400	0.01200	0.97135	1907.0	46.0	1714.0	57.0	2110	28	2110.0	28.0	18.8	Single Age
12WPY31_26	2520.00	5.21	3.60200	0.06900	0.25640	0.00450	0.90378	1549.0	15.0	1471.0	23.0	1664	22	1664.0	22.0	11.6	Rim
12WPY31_26	307.00	1.00	6.14000	0.11000	0.34680	0.00330	0.86350	1995.0	15.0	1919.0	16.0	2075	18	2075.0	18.0	7.5	Core
12WPY31_27	97.70	1.41	0.81200	0.01700	0.09810	0.00140	0.17092	602.9	9.4	603.4	8.4	594	44	603.4	8.4	0.1	Single Age
12WPY31_28	1061.00	7.74	0.99600	0.02000	0.10970	0.00200	0.84386	702.0	10.0	671.0	12.0	825	21	671.0	12.0	4.4	Single Age
12WPY31_29	35.10	1.05	7.06100	0.07900	0.38530	0.00400	0.47067	2118.2	9.9	2103.0	18.0	2119	20	2119.0	20.0	0.8	Single Age
12WPY31_30	87.50	0.64	1.96800	0.03600	0.19010	0.00340	0.87182	1103.0	13.0	1121.0	19.0	1054	25	1121.0	19.0	1.6	Single Age
12WPY31_31	90.60	0.75	1.60900	0.03600	0.16290	0.00330	0.87057	972.0	14.0	973.0	18.0	958	28	973.0	18.0	0.1	Single Age
12WPY31_32	42.50	0.47	1.57700	0.03000	0.15480	0.00240	0.04741	960.0	12.0	928.0	14.0	1041	46	928.0	14.0	3.3	Single Age
12WPY31_33	174.00	1.93	5.79000	0.15000	0.34150	0.00690	0.93275	1945.0	22.0	1893.0	33.0	2003	18	2003.0	18.0	5.5	Single Age
12WPY31_34	207.90	1.16	5.38200	0.07100	0.30120	0.00350	0.89381	1883.0	12.0	1697.0	17.0	2091	12	2091.0	12.0	18.8	Single Age
12WPY31_35	332.00	3.70	0.99400	0.01100	0.11340	0.00110	0.48408	700.6	5.7	692.6	6.3	713	21	692.6	6.3	1.1	Single Age
12WPY31_36	480.00	1.55	0.76080	0.00600	0.09317	0.00077	0.42221	574.4	3.5	574.2	4.5	570	20	574.2	4.5	0.0	Single Age
12WPY31_37	111.40	0.21	1.62500	0.04500	0.15360	0.00200	0.53258	979.0	17.0	921.0	11.0	1108	44	921.0	11.0	5.9	Single Age
12WPY31_39	720.00	11.80	0.98400	0.01100	0.11070	0.00110	0.82379	695.3	5.7	676.7	6.4	743	13	676.7	6.4	2.7	Single Age
12WPY31_40	323.00	2.57	5.51200	0.08900	0.33190	0.00390	0.90380	1901.0	14.0	1847.0	19.0	1954	15	1954.0	15.0	5.5	Single Age
12WPY31_41	38.80	0.35	2.91000	0.15000	0.19250	0.00810	0.94949	1380.0	39.0	1132.0	43.0	1779	36	DISC	DISC	18.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY31_42	251.00	0.24	1.65400	0.02800	0.16090	0.00200	0.74059	991.0	10.0	962.0	11.0	1040	20	962.0	11.0	2.9	Single Age
12WPY31_43	95.10	0.69	1.80600	0.03000	0.18020	0.00220	0.51711	1049.0	11.0	1068.0	12.0	1010	26	1068.0	12.0	1.8	Single Age
12WPY31_44	57.60	1.16	1.77900	0.02700	0.17270	0.00260	0.23813	1038.3	9.6	1027.0	14.0	1048	37	1027.0	14.0	1.1	Single Age
12WPY31_45	38.40	1.23	12.39000	0.21000	0.49100	0.01000	0.68058	2632.0	16.0	2580.0	46.0	2683	26	2683.0	26.0	3.8	Single Age
12WPY31_46	87.70	0.54	1.65100	0.02200	0.16680	0.00140	0.36003	989.4	8.2	994.2	7.9	962	25	994.2	7.9	0.5	Single Age
12WPY31_47	174.50	1.64	1.77100	0.01800	0.17470	0.00150	0.52837	1035.1	6.8	1038.1	8.2	1011	19	1038.1	8.2	0.3	Single Age
12WPY31_48	280.40	2.00	0.90400	0.01200	0.10630	0.00150	0.71177	654.3	6.6	651.4	8.7	656	21	651.4	8.7	0.4	Single Age
12WPY31_49	194.20	1.74	1.00300	0.01100	0.11730	0.00110	0.57895	705.2	5.6	715.1	6.2	663	22	715.1	6.2	1.4	Single Age
12WPY31_51	126.20	1.26	1.66400	0.01800	0.16800	0.00140	0.46576	994.4	6.7	1000.7	8.0	961	21	1000.7	8.0	0.6	Single Age
12WPY31_52	125.00	0.61	1.79400	0.01700	0.17490	0.00150	0.40621	1043.0	6.0	1038.9	8.4	1052	20	1038.9	8.4	0.4	Single Age
12WPY31_53	138.70	0.76	1.85100	0.02200	0.18130	0.00190	0.65114	1063.3	7.9	1074.0	10.0	1039	19	1074.0	10.0	1.0	Single Age
12WPY31_54	136.40	0.53	0.70010	0.00910	0.08590	0.00110	0.29484	539.3	5.6	530.9	6.3	583	36	530.9	6.3	1.6	Single Age
12WPY31_55	246.00	5.61	0.75890	0.00760	0.09255	0.00072	0.28061	573.2	4.4	570.6	4.3	579	24	570.6	4.3	0.5	Single Age
12WPY31_56	47.60	1.39	0.94500	0.02000	0.11230	0.00160	0.21998	675.0	10.0	686.0	9.3	657	48	686.0	9.3	1.6	Single Age
12WPY31_57	231.00	2.84	0.99300	0.01400	0.11630	0.00140	0.59670	700.6	7.0	709.2	7.8	678	25	709.2	7.8	1.2	Single Age
12WPY31_58	122.10	0.31	0.75600	0.01700	0.09200	0.00150	0.27320	571.0	10.0	567.1	8.7	604	52	567.1	8.7	0.7	Single Age
12WPY31_59	211.20	1.84	3.33000	0.10000	0.19980	0.00510	0.89096	1484.0	24.0	1173.0	27.0	1945	26	DISC	DISC	21.0	Single Age
12WPY31_60	141.10	0.83	0.79900	0.01600	0.09790	0.00230	0.57779	595.4	8.9	602.0	13.0	588	45	602.0	13.0	1.1	Single Age
12WPY31_61	150.00	1.93	0.97300	0.01200	0.11430	0.00130	0.51397	689.6	6.4	697.5	7.8	647	26	697.5	7.8	1.1	Single Age
12WPY31_62	497.00	0.77	0.91310	0.00830	0.10567	0.00078	0.53018	658.6	4.4	647.5	4.6	709	17	647.5	4.6	1.7	Single Age
12WPY31_63	206.80	1.66	5.70200	0.04400	0.34010	0.00340	0.56898	1931.4	6.6	1887.0	16.0	1979	15	1979.0	15.0	4.6	Single Age
12WPY31_64	210.00	0.65	4.72200	0.05300	0.30440	0.00320	0.75435	1770.3	9.5	1715.0	16.0	1841	14	1841.0	14.0	6.8	Single Age
12WPY31_65	25.70	48.00	0.93600	0.06700	0.10890	0.00450	0.23159	667.0	35.0	666.0	26.0	790	130	666.0	26.0	0.1	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY31_65	174.00	0.80	1.77800	0.02500	0.17480	0.00190	0.50373	1037.2	9.1	1039.0	11.0	1043	29	1039.0	11.0	0.2	Core
12WPY31_66	272.00	1.64	1.50800	0.01500	0.15740	0.00140	0.61511	934.7	6.1	942.0	7.8	920	16	942.0	7.8	0.8	Single Age
12WPY31_67	142.60	2.11	1.42800	0.01900	0.15410	0.00190	0.70705	900.2	7.8	924.0	11.0	844	21	924.0	11.0	2.6	Single Age
12WPY31_68	290.00	1.43	1.25400	0.01100	0.13760	0.00110	0.42440	825.1	4.8	830.9	6.4	830	19	830.9	6.4	0.7	Single Age
12WPY31_69	101.00	6.10	0.87700	0.04100	0.10410	0.00370	0.27917	639.0	22.0	639.0	21.0	650	140	639.0	21.0	0.0	Rim
12WPY31_69	277.00	1.34	2.28200	0.01700	0.19000	0.00170	0.50573	1206.6	5.4	1121.1	9.2	1356	13	1121.1	9.2	7.1	Core
12WPY31_70	127.70	1.08	5.45700	0.04100	0.34650	0.00240	0.59131	1895.0	6.7	1918.0	11.0	1872	13	1872.0	13.0	2.5	Single Age
12WPY31_71	104.20	0.45	5.60000	0.18000	0.34360	0.00970	0.96635	1909.0	28.0	1901.0	47.0	1933	14	1933.0	14.0	1.7	Single Age
12WPY31_72	47.40	0.56	0.86600	0.02000	0.10520	0.00140	0.11519	632.0	11.0	644.7	8.2	585	52	644.7	8.2	2.0	Single Age
12WPY31_73	76.40	0.88	1.84300	0.02500	0.18270	0.00160	0.41523	1061.4	8.7	1081.9	8.5	1020	25	1081.9	8.5	1.9	Single Age
12WPY31_75	374.00	3.45	9.86000	0.17000	0.41700	0.00880	0.93942	2420.0	16.0	2244.0	40.0	2579	12	2579.0	12.0	13.0	Single Age
12WPY31_76	79.60	0.86	0.89800	0.01600	0.10810	0.00150	0.30012	651.0	8.3	661.7	8.7	615	36	661.7	8.7	1.6	Single Age
12WPY31_77	294.90	1.54	1.69000	0.01700	0.16800	0.00130	0.23730	1004.4	6.4	1002.0	7.4	1014	19	1002.0	7.4	0.2	Single Age
12WPY31_78	287.00	0.89	1.60100	0.01800	0.16330	0.00190	0.48949	971.4	7.4	975.0	10.0	977	23	975.0	10.0	0.4	Single Age
12WPY31_79	368.00	1.95	11.45000	0.13000	0.47090	0.00540	0.65427	2559.0	11.0	2490.0	24.0	2629	12	2629.0	12.0	5.3	Single Age
12WPY31_80	92.80	0.81	15.61000	0.20000	0.55590	0.00660	0.90445	2852.0	12.0	2848.0	27.0	2863	9	2863.3	8.8	0.5	Single Age
12WPY31_81	388.00	8.01	1.03500	0.01400	0.11820	0.00120	0.70565	721.0	6.9	720.3	6.8	729	18	720.3	6.8	0.1	Rim
12WPY31_81	193.00	2.45	1.36900	0.04200	0.14440	0.00230	0.70977	875.0	18.0	869.0	13.0	894	51	869.0	13.0	0.7	Core
12WPY31_82	308.00	6.90	6.76000	0.16000	0.38200	0.00690	0.95297	2076.0	23.0	2084.0	32.0	2069	18	2069.0	18.0	0.7	Single Age
12WPY31_83	118.00	0.89	5.50700	0.07700	0.34080	0.00470	0.78630	1903.0	12.0	1890.0	23.0	1930	17	1930.0	17.0	2.1	Single Age
12WPY31_84	401.00	4.94	15.70000	0.20000	0.54240	0.00410	0.55092	2858.0	12.0	2793.0	17.0	2912	15	2912.0	15.0	4.1	Single Age
12WPY31_85	172.80	0.69	0.98810	0.00990	0.11441	0.00091	0.40388	697.5	5.1	698.3	5.2	708	22	698.3	5.2	0.1	Single Age
12WPY31_86	136.30	0.42	4.57100	0.04900	0.28380	0.00350	0.81963	1747.1	9.1	1613.0	18.0	1918	15	1918.0	15.0	15.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY31_87	289.00	1.28	3.19000	0.13000	0.20960	0.00430	0.94917	1457.0	31.0	1226.0	23.0	1815	36	DISC	DISC	32.5	Single Age
12WPY31_88	115.80	1.05	2.79200	0.04500	0.20730	0.00240	0.65512	1352.0	12.0	1214.0	13.0	1575	24	1575.0	24.0	22.9	Single Age
12WPY31_89	530.00	0.85	8.95000	0.21000	0.36660	0.00800	0.97152	2328.0	21.0	2011.0	38.0	2627	8	2627.0	8.2	23.4	Single Age
12WPY31_90	113.10	1.06	5.38700	0.05700	0.34340	0.00390	0.93119	1881.9	9.1	1903.0	19.0	1871	13	1871.0	13.0	1.7	Single Age
12WPY31_91	67.40	1.91	0.95300	0.01500	0.11000	0.00140	0.52155	680.2	8.1	672.9	7.9	690	30	672.9	7.9	1.1	Single Age
12WPY31_92	232.00	2.02	6.14000	0.04400	0.36010	0.00310	0.78615	1995.6	6.3	1984.0	15.0	2013	8	2013.0	8.1	1.4	Single Age
12WPY31_93	249.00	1.26	0.68800	0.00810	0.08670	0.00088	0.27904	531.4	4.9	535.9	5.2	522	28	535.9	5.2	0.8	Single Age
12WPY31_94	215.00	1.82	9.81000	0.29000	0.42700	0.01000	0.96742	2414.0	27.0	2287.0	47.0	2529	13	2529.0	13.0	9.6	Single Age
12WPY31_95	175.00	4.48	1.08200	0.03000	0.12380	0.00270	0.81725	743.0	14.0	752.0	16.0	695	30	752.0	16.0	1.2	Single Age
12WPY31_96	193.00	6.90	0.88400	0.01600	0.10450	0.00120	0.51861	642.3	8.7	640.7	7.1	642	30	640.7	7.1	0.2	Single Age
12WPY31_97	123.40	1.10	7.05000	0.10000	0.32720	0.00450	0.69978	2117.0	13.0	1825.0	22.0	2409	20	2409.0	20.0	24.2	Single Age
12WPY31_98	282.00	1.14	1.38100	0.02300	0.14530	0.00260	0.84382	880.4	9.8	874.0	15.0	884	23	874.0	15.0	0.7	Single Age
12WPY31_99	471.00	2.93	0.77770	0.00750	0.09572	0.00084	0.62982	584.0	4.3	589.2	5.0	559	17	589.2	5.0	0.9	Single Age
12WPY31_100	393.00	4.37	9.21000	0.46000	0.39800	0.01600	0.99005	2337.0	48.0	2153.0	75.0	2522	20	2522.0	20.0	14.6	Single Age
12WPY31_101	852.00	77.00	2.66300	0.06300	0.17660	0.00340	0.72150	1318.0	17.0	1048.0	19.0	1797	30	DISC	DISC	20.5	Rim
12WPY31_101	483.00	7.00	6.97000	0.40000	0.28300	0.01200	0.98021	2096.0	52.0	1602.0	60.0	2627	28	DISC	DISC	39.0	Core
12WPY31_102	299.00	1.15	0.91300	0.01700	0.10740	0.00180	0.81040	658.0	8.9	657.0	10.0	671	23	657.0	10.0	0.2	Single Age
12WPY31_103	1045.00	6.58	3.07900	0.08000	0.22340	0.00340	0.77083	1427.0	19.0	1299.0	18.0	1614	27	1614.0	27.0	19.5	Single Age
12WPY31_104	222.20	1.58	0.68560	0.00860	0.08697	0.00088	0.39466	529.9	5.2	537.6	5.2	495	27	537.6	5.2	1.5	Single Age
12WPY31_105	184.00	1.93	7.05000	0.39000	0.37200	0.01800	0.98580	2091.0	53.0	2026.0	87.0	2189	17	2189.0	17.0	7.4	Single Age
12WPY31_106	212.20	0.33	10.47000	0.16000	0.43870	0.00750	0.80422	2479.0	15.0	2348.0	34.0	2583	15	2583.0	15.0	9.1	Single Age
12WPY31_107	202.40	0.96	4.98900	0.07300	0.30510	0.00420	0.86938	1816.0	12.0	1716.0	21.0	1918	15	1918.0	15.0	10.5	Single Age
12WPY31_108	326.00	0.61	0.87830	0.00780	0.10487	0.00090	0.40208	639.9	4.2	642.8	5.3	629	20	642.8	5.3	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY31_109	220.30	0.79	0.78620	0.00860	0.09424	0.00089	0.36331	588.8	4.9	580.5	5.3	621	26	580.5	5.3	1.4	Single Age
12WPY31_110	195.80	0.76	6.45000	0.06900	0.37570	0.00400	0.82677	2038.3	9.6	2055.0	19.0	2003	13	2003.0	13.0	2.6	Single Age
12WPY31_112	65.80	0.67	4.75200	0.04700	0.31710	0.00330	0.54762	1775.7	8.3	1775.0	16.0	1777	18	1777.0	18.0	0.1	Single Age
12WPY31_113	124.10	1.00	2.03100	0.02600	0.18340	0.00230	0.59880	1125.3	8.8	1087.0	12.0	1190	23	1087.0	12.0	3.4	Single Age
12WPY31_114	64.20	0.73	14.22000	0.24000	0.55050	0.00840	0.61831	2764.0	16.0	2827.0	35.0	2713	19	2713.0	19.0	4.2	Single Age
12WPY31_115	779.00	18.90	0.75050	0.00750	0.09147	0.00083	0.80946	568.4	4.3	564.2	4.9	583	16	564.2	4.9	0.7	Single Age
12WPY31_116	55.40	3.38	1.03400	0.03100	0.10250	0.00180	0.20249	719.0	15.0	629.0	10.0	1013	62	DISC	DISC	12.5	Single Age
12WPY31_117	283.00	4.38	0.90000	0.01400	0.10370	0.00170	0.71572	653.1	7.7	636.0	10.0	701	28	636.0	10.0	2.6	Single Age
12WPY31_118	268.00	0.62	1.90200	0.02600	0.18390	0.00230	0.66020	1081.0	9.1	1088.0	12.0	1073	20	1088.0	12.0	0.6	Single Age
12WPY31_119	260.00	0.97	12.43000	0.19000	0.46670	0.00710	0.81134	2636.0	14.0	2468.0	31.0	2755	16	2755.0	16.0	10.4	Single Age
12WPY31_120	193.30	0.61	10.75000	0.17000	0.46720	0.00600	0.81921	2500.0	15.0	2471.0	26.0	2515	15	2515.0	15.0	1.7	Single Age
12WPY31_121	272.00	1.07	9.22000	0.35000	0.40000	0.01200	0.98242	2347.0	39.0	2166.0	57.0	2511	21	2511.0	21.0	13.7	Single Age
12WPY31_122	168.00	4.03	0.79400	0.01000	0.09790	0.00100	0.37934	593.2	5.8	601.9	5.9	553	28	601.9	5.9	1.5	Single Age
12WPY31_123	312.00	0.64	0.87300	0.01200	0.10380	0.00130	0.80972	637.0	6.3	636.6	7.6	630	18	636.6	7.6	0.1	Single Age
12WPY31_124	119.00	1.15	0.98600	0.01500	0.11730	0.00130	0.42867	696.2	7.5	715.0	7.5	637	32	715.0	7.5	2.7	Single Age
12WPY31_125	444.00	6.43	0.94400	0.01500	0.11010	0.00120	0.69177	674.8	7.6	673.5	7.2	668	24	673.5	7.2	0.2	Single Age
12WPY31_126	251.00	5.69	0.99000	0.01400	0.11530	0.00140	0.11224	698.4	7.0	703.7	7.8	685	32	703.7	7.8	0.8	Single Age
12WPY31_127	152.40	1.23	1.67200	0.02000	0.16850	0.00160	0.55688	997.3	7.8	1003.6	8.7	988	20	1003.6	8.7	0.6	Single Age
12WPY31_128	138.00	2.05	0.84800	0.01200	0.10189	0.00097	0.26514	624.2	6.8	625.4	5.6	607	32	625.4	5.6	0.2	Single Age
12WPY31_129	361.80	1.91	1.03850	0.00940	0.11890	0.00100	0.67668	723.6	4.8	724.3	5.8	714	17	724.3	5.8	0.1	Single Age
12WPY32_1	85.00	0.73	6.25200	0.05100	0.37290	0.00360	0.61009	2011.3	7.1	2043.0	17.0	1977	6	1977.2	6.1	3.3	Single Age
12WPY32_2	86.60	1.11	6.11800	0.07100	0.36850	0.00470	0.81473	1993.0	10.0	2025.0	21.0	1964	7	1963.5	7.0	3.1	Single Age
12WPY32_3	18.80	0.32	1.61000	0.02500	0.16360	0.00180	0.17198	975.8	9.9	976.0	10.0	969	20	976.0	10.0	0.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY32_4	138.00	0.90	11.14000	0.30000	0.46030	0.00890	0.96596	2534.0	25.0	2439.0	39.0	2602	8	2602.4	8.0	6.3	Single Age
12WPY32_5	141.00	1.33	0.88700	0.01900	0.10490	0.00200	0.81450	644.0	10.0	643.0	12.0	711	19	643.0	12.0	0.2	Single Age
12WPY32_6	426.00	0.56	1.03300	0.01500	0.12010	0.00220	0.84355	720.3	7.4	731.0	13.0	713	16	731.0	13.0	1.5	Single Age
12WPY32_7	330.00	0.77	0.88600	0.01000	0.10612	0.00094	0.56485	644.2	5.4	650.1	5.5	630	10	650.1	5.5	0.9	Single Age
12WPY32_8	236.00	1.56	1.69600	0.03000	0.17070	0.00280	0.90481	1006.0	11.0	1019.0	15.0	964	11	1019.0	15.0	1.3	Single Age
12WPY32_9	468.70	17.38	5.90400	0.06500	0.36950	0.00370	0.61141	1961.1	9.6	2027.0	17.0	1883	10	1883.3	9.9	7.6	Single Age
12WPY32_11	182.00	1.01	1.79700	0.02900	0.17670	0.00140	0.32790	1043.0	11.0	1049.1	7.5	1033	15	1049.1	7.5	0.6	Single Age
12WPY32_12	233.00	1.58	0.97700	0.01700	0.11730	0.00210	0.83658	691.4	9.0	715.0	12.0	617	15	715.0	12.0	3.4	Single Age
12WPY32_13	194.90	1.20	8.65000	0.16000	0.39710	0.00460	0.84157	2299.0	17.0	2155.0	21.0	2418	12	2418.0	12.0	10.9	Single Age
12WPY32_14	78.70	0.80	1.77100	0.03500	0.17410	0.00220	0.83339	1034.0	13.0	1035.0	12.0	1029	11	1035.0	12.0	0.1	Single Age
12WPY32_15	37.10	42.20	0.77900	0.01700	0.09480	0.00130	0.64912	583.9	9.9	583.8	7.5	607	18	583.8	7.5	0.0	Single Age
12WPY32_16	938.00	13.90	1.16200	0.01200	0.13480	0.00120	0.68947	783.6	5.7	815.4	7.0	705	5	815.4	7.0	4.1	Single Age
12WPY32_17	155.00	0.97	6.04200	0.08100	0.36230	0.00410	0.89043	1981.0	12.0	1995.0	19.0	1956	6	1956.0	6.4	2.0	Single Age
12WPY32_18	97.90	0.57	6.84700	0.07000	0.38380	0.00330	0.61014	2091.2	9.1	2094.0	16.0	2075	8	2075.4	7.9	0.9	Single Age
12WPY32_19	101.50	0.63	1.88200	0.06900	0.18030	0.00190	0.74074	1065.0	19.0	1070.0	11.0	1046	40	1070.0	11.0	0.5	Single Age
12WPY32_20	237.00	1.03	9.43000	0.06800	0.45760	0.00430	0.64594	2380.4	6.6	2431.0	19.0	2337	5	2336.5	5.2	4.0	Single Age
12WPY32_21	221.00	2.74	1.49100	0.09200	0.14470	0.00470	0.93167	920.0	39.0	870.0	27.0	1090	60	870.0	27.0	5.4	Single Age
12WPY32_22	525.00	4.91	6.66400	0.06300	0.37770	0.00480	0.60543	2067.1	8.4	2065.0	22.0	2070	19	2070.0	19.0	0.2	Single Age
12WPY32_23	137.70	1.26	1.62900	0.02300	0.16560	0.00150	0.81326	980.7	9.1	987.9	8.5	961	8	987.9	8.5	0.7	Single Age
12WPY32_24	99.00	1.56	0.91000	0.01000	0.10763	0.00087	0.47320	656.8	5.5	658.9	5.0	651	10	658.9	5.0	0.3	Single Age
12WPY32_25	122.20	0.85	0.88870	0.00970	0.10504	0.00082	0.42693	645.4	5.2	643.8	4.8	655	14	643.8	4.8	0.2	Single Age
12WPY32_26	297.00	1.36	1.53400	0.02600	0.16060	0.00200	0.76539	945.0	11.0	960.0	11.0	884	9	960.0	11.0	1.6	Single Age
12WPY32_27	70.70	0.35	1.44000	0.01500	0.15250	0.00130	0.36150	905.3	6.1	915.0	7.0	878	13	915.0	7.0	1.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY32_28	119.80	0.82	12.15800	0.08400	0.48940	0.00280	0.32380	2617.3	6.7	2568.0	12.0	2639	6	2638.9	6.0	2.7	Single Age
12WPY32_29	230.00	0.72	0.97200	0.01400	0.11640	0.00150	0.78108	689.1	7.4	709.5	8.7	630	10	709.5	8.7	3.0	Single Age
12WPY32_30	293.00	1.40	6.18600	0.05100	0.35360	0.00260	0.55075	2003.1	7.4	1952.0	12.0	2037	6	2037.1	6.0	4.2	Single Age
12WPY32_31	251.00	0.76	1.39700	0.01200	0.14810	0.00130	0.61341	887.3	5.0	891.2	7.2	860	7	891.2	7.2	0.4	Single Age
12WPY32_32	106.20	1.19	0.95400	0.01100	0.11012	0.00097	0.48209	679.7	5.6	673.4	5.6	684	13	673.4	5.6	0.9	Single Age
12WPY32_33	350.00	0.49	1.05600	0.01300	0.12300	0.00150	0.72363	731.7	6.7	747.8	8.8	658	10	747.8	8.8	2.2	Single Age
12WPY32_34	236.00	1.29	11.50000	0.16000	0.45810	0.00690	0.89157	2566.0	12.0	2430.0	30.0	2651	7	2650.8	7.0	8.3	Single Age
12WPY32_35	72.20	0.60	1.53300	0.01600	0.15680	0.00150	0.33097	943.4	6.3	938.8	8.6	931	12	938.8	8.6	0.5	Single Age
12WPY32_36	331.00	1.64	7.01000	0.29000	0.34100	0.01100	0.96154	2104.0	37.0	1891.0	53.0	2293	25	2293.0	25.0	17.5	Single Age
12WPY32_37	67.60	0.55	1.71700	0.01500	0.17130	0.00140	0.24439	1014.6	5.7	1019.3	7.8	990	10	1019.3	7.8	0.5	Single Age
12WPY32_38	16.73	25.60	0.89500	0.02100	0.10260	0.00150	0.08007	648.0	11.0	629.7	8.8	664	33	629.7	8.8	2.8	Single Age
12WPY32_39	213.30	0.78	8.90000	0.12000	0.36840	0.00640	0.63675	2328.0	12.0	2021.0	30.0	2552	12	2552.0	12.0	20.8	Single Age
12WPY32_41	20.55	1.11	1.43900	0.02400	0.15410	0.00220	0.33956	905.0	10.0	924.0	12.0	828	19	924.0	12.0	2.1	Single Age
12WPY32_42	665.00	2.33	9.91700	0.09100	0.39400	0.00280	0.50332	2426.6	8.5	2141.0	13.0	2652	8	2651.5	7.7	19.3	Single Age
12WPY32_43	334.00	0.86	1.23000	0.01300	0.13840	0.00150	0.59955	813.9	5.8	835.4	8.5	770	10	835.4	8.5	2.6	Single Age
12WPY32_44	112.00	1.12	1.17200	0.01700	0.12610	0.00120	0.37968	787.2	8.0	765.7	6.6	845	17	765.7	6.6	2.7	Single Age
12WPY32_45	28.40	0.43	1.66400	0.02400	0.16800	0.00200	0.16064	994.1	9.3	1001.0	11.0	961	15	1001.0	11.0	0.7	Single Age
12WPY32_46	183.00	1.08	5.14000	0.16000	0.32560	0.00810	0.96622	1841.0	27.0	1815.0	40.0	1845	9	1845.4	9.3	1.6	Single Age
12WPY32_47	232.10	4.53	1.01060	0.00870	0.11768	0.00091	0.44620	709.0	4.4	717.2	5.2	670	8	717.2	5.2	1.2	Single Age
12WPY32_48	141.00	0.76	6.40400	0.07800	0.37460	0.00370	0.82772	2033.0	11.0	2051.0	17.0	2018	5	2018.1	5.3	1.6	Single Age
12WPY32_49	489.00	2.09	1.11500	0.01300	0.12920	0.00160	0.22663	760.4	6.1	783.1	8.9	706	9	783.1	8.9	3.0	Single Age
12WPY32_50	81.20	0.63	10.84000	0.12000	0.44790	0.00530	0.90952	2511.0	11.0	2385.0	24.0	2599	7	2599.3	7.4	8.2	Single Age
12WPY32_51	273.70	3.66	3.45900	0.04900	0.23260	0.00250	0.82464	1517.0	11.0	1348.0	13.0	1758	8	1758.2	7.8	23.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY32_52	209.00	0.95	1.36200	0.01500	0.14620	0.00130	0.45974	872.4	6.4	879.8	7.1	834	13	879.8	7.1	0.8	Single Age
12WPY32_53	144.00	3.36	1.84600	0.02700	0.18270	0.00170	0.65683	1061.4	9.6	1081.6	9.2	1015	10	1081.6	9.2	1.9	Single Age
12WPY32_54	260.00	3.66	1.00720	0.00950	0.11749	0.00097	0.55121	707.9	4.9	716.1	5.6	693	7	716.1	5.6	1.2	Single Age
12WPY32_55	124.00	1.55	0.84880	0.00960	0.10250	0.00081	0.43624	624.4	5.4	629.6	4.8	616	11	629.6	4.8	0.8	Single Age
12WPY32_56	231.00	1.19	1.22100	0.01600	0.13770	0.00180	0.75399	811.0	7.7	831.5	9.9	761	10	831.5	9.9	2.5	Single Age
12WPY32_58	203.20	1.44	1.88900	0.01900	0.18680	0.00180	0.62704	1076.8	6.6	1104.1	9.6	1042	8	1104.1	9.6	2.5	Single Age
12WPY32_59	275.00	1.33	6.11400	0.09900	0.35070	0.00430	0.87837	1993.0	14.0	1937.0	20.0	2046	5	2046.1	5.4	5.3	Single Age
12WPY32_60	160.20	0.09	1.04900	0.03600	0.10061	0.00097	0.48476	726.0	17.0	617.9	5.7	1099	50	DISC	DISC	14.9	Single Age
12WPY32_62	227.70	0.34	0.67500	0.01300	0.07850	0.00110	0.56961	524.9	7.4	487.1	6.6	626	17	487.1	6.6	7.2	Single Age
12WPY32_63	222.00	0.83	1.60900	0.02200	0.16360	0.00180	0.75948	973.3	8.7	976.8	9.8	972	9	976.8	9.8	0.4	Single Age
12WPY32_64	66.20	0.49	4.04500	0.03800	0.25250	0.00360	0.70562	1643.0	7.6	1451.0	18.0	1828	11	1828.0	11.0	20.6	Single Age
12WPY32_65	1001.00	1.69	1.54600	0.01800	0.13940	0.00100	0.30159	948.6	7.3	841.4	5.8	1251	14	DISC	DISC	11.3	Single Age
12WPY32_66	170.10	1.37	1.11900	0.01100	0.12615	0.00095	0.50118	762.1	5.3	765.8	5.4	764	9	765.8	5.4	0.5	Single Age
12WPY32_67	405.50	2.56	8.50000	0.24000	0.37170	0.00650	0.93309	2291.0	23.0	2037.0	31.0	2475	19	2475.0	19.0	17.7	Single Age
12WPY32_68	44.50	2.39	1.11500	0.02000	0.12630	0.00170	0.61041	761.2	9.4	766.4	9.7	716	19	766.4	9.7	0.7	Single Age
12WPY32_69	24.03	0.29	6.70100	0.06800	0.38050	0.00340	0.54863	2071.9	9.0	2078.0	16.0	2050	8	2050.3	8.3	1.4	Single Age
12WPY32_70	57.40	0.90	1.18900	0.04400	0.12990	0.00320	0.89159	792.0	21.0	787.0	19.0	822	21	787.0	19.0	0.6	Single Age
12WPY32_71	125.90	1.01	1.69300	0.01900	0.17030	0.00140	0.60712	1006.3	7.3	1013.8	7.9	966	9	1013.8	7.9	0.7	Single Age
12WPY32_72	135.00	10.50	1.05100	0.04100	0.12070	0.00300	0.92348	726.0	20.0	734.0	18.0	694	26	734.0	18.0	1.1	Single Age
12WPY32_73	96.00	0.69	12.70000	0.16000	0.51290	0.00670	0.83724	2656.0	12.0	2668.0	28.0	2640	6	2640.3	5.6	1.0	Single Age
12WPY32_74	291.00	0.90	6.16600	0.04300	0.36280	0.00400	0.85226	1999.4	6.0	1995.0	19.0	1995	6	1994.5	5.6	0.0	Single Age
12WPY32_75	130.60	1.08	1.01700	0.01300	0.11550	0.00120	0.38007	712.2	6.4	704.6	6.7	678	13	704.6	6.7	1.1	Single Age
12WPY32_77	106.10	0.69	1.70600	0.01800	0.16840	0.00140	0.50442	1010.3	7.0	1003.2	8.0	1019	9	1003.2	8.0	0.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY32_78	381.00	0.58	6.01600	0.07600	0.35840	0.00440	0.82056	1978.0	11.0	1974.0	21.0	1942	10	1942.2	9.9	1.6	Single Age
12WPY32_79	194.20	1.50	0.81160	0.00610	0.09731	0.00086	0.52973	603.8	3.3	598.6	5.1	584	11	598.6	5.1	0.9	Single Age
12WPY32_80	589.00	1.61	8.44000	0.10000	0.31620	0.00520	0.80438	2283.0	11.0	1770.0	25.0	2699	13	DISC	DISC	34.4	Single Age
12WPY32_81	68.40	0.77	1.89800	0.01900	0.18470	0.00180	0.53760	1080.0	6.8	1092.6	9.7	1018	11	1092.6	9.7	1.2	Single Age
12WPY32_82	67.40	1.23	1.39600	0.02800	0.14600	0.00130	0.40559	886.0	12.0	878.7	7.5	866	34	878.7	7.5	0.8	Single Age
12WPY32_83	452.00	2.71	0.79300	0.00630	0.09804	0.00083	0.48547	592.8	3.6	602.9	4.9	536	8	602.9	4.9	1.7	Single Age
12WPY32_84	69.40	0.77	5.63400	0.04600	0.33860	0.00300	0.56786	1920.9	7.0	1880.0	14.0	1957	7	1957.0	6.7	3.9	Single Age
12WPY32_85	55.00	0.87	1.69000	0.02700	0.17180	0.00250	0.76089	1005.0	10.0	1022.0	14.0	944	14	1022.0	14.0	1.7	Single Age
12WPY32_86	105.70	1.28	9.17000	0.17000	0.42360	0.00640	0.93957	2353.0	17.0	2276.0	29.0	2392	10	2392.0	10.0	4.8	Single Age
12WPY32_87	114.20	0.76	1.74300	0.02700	0.17120	0.00210	0.57180	1024.3	9.8	1019.0	11.0	1013	21	1019.0	11.0	0.5	Single Age
12WPY32_88	99.10	1.48	2.01300	0.04000	0.18270	0.00150	0.16313	1118.0	13.0	1081.8	7.9	1190	34	1081.8	7.9	3.2	Single Age
12WPY32_89	419.00	10.30	0.66200	0.02600	0.08210	0.00260	0.97261	514.0	16.0	508.0	16.0	553	12	508.0	16.0	1.2	Single Age
12WPY32_90	122.30	0.64	0.95600	0.01100	0.10370	0.00130	0.58327	680.9	5.7	636.3	7.3	721	11	636.3	7.3	6.6	Single Age
12WPY32_91	335.00	0.59	0.84300	0.01300	0.10090	0.00140	0.82081	621.6	6.9	619.7	8.2	659	9	619.7	8.2	0.3	Single Age
12WPY32_92	96.00	1.23	1.78400	0.01900	0.17370	0.00230	0.55878	1039.2	7.1	1032.0	13.0	1053	11	1032.0	13.0	0.7	Single Age
12WPY32_93	43.40	0.93	0.88600	0.01600	0.10592	0.00079	0.21327	643.6	8.7	649.0	4.6	643	25	649.0	4.6	0.8	Single Age
12WPY32_94	165.00	0.77	1.03660	0.00950	0.11920	0.00110	0.34888	722.0	4.7	726.8	6.5	718	11	726.8	6.5	0.7	Single Age
12WPY32_95	77.00	0.81	1.79700	0.01900	0.17530	0.00170	0.27269	1045.1	6.7	1041.0	9.5	1053	13	1041.0	9.5	0.4	Single Age
12WPY32_96	94.50	79.50	0.91800	0.01400	0.10860	0.00120	0.22825	660.9	7.2	664.7	7.2	687	15	664.7	7.2	0.6	Single Age
12WPY32_97	199.10	0.77	5.93700	0.09200	0.35930	0.00440	0.78979	1972.0	13.0	1978.0	21.0	1971	9	1971.0	9.2	0.4	Single Age
12WPY32_98	156.20	0.47	0.84900	0.01400	0.10100	0.00150	0.82962	624.4	7.7	620.2	8.5	647	11	620.2	8.5	0.7	Single Age
12WPY32_99	62.80	0.93	1.48200	0.02200	0.14990	0.00210	0.78022	923.6	8.9	900.0	12.0	977	11	900.0	12.0	2.6	Single Age
12WPY32_100	103.00	0.82	1.19000	0.01100	0.13180	0.00160	0.69468	795.6	5.3	797.9	9.2	801	11	797.9	9.2	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY32_101	80.60	2.06	1.92300	0.02300	0.18950	0.00180	0.59941	1088.7	7.9	1118.6	9.7	1034	11	1118.6	9.7	2.7	Single Age
12WPY32_102	288.00	31.20	5.94800	0.07300	0.34910	0.00460	0.78002	1967.0	11.0	1933.0	23.0	1984	7	1983.8	6.9	2.6	Single Age
12WPY32_103	26.40	0.37	1.85900	0.03600	0.18030	0.00190	0.41368	1067.0	13.0	1068.0	11.0	1062	24	1068.0	11.0	0.1	Single Age
12WPY32_104	55.60	0.65	1.26900	0.02600	0.14370	0.00240	0.81998	831.0	12.0	865.0	14.0	739	10	865.0	14.0	4.1	Single Age
12WPY32_105	401.00	0.98	5.87000	0.12000	0.34620	0.00530	0.94954	1955.0	19.0	1916.0	26.0	1985	8	1984.5	7.8	3.5	Single Age
12WPY32_106	91.90	0.63	1.88000	0.02300	0.18670	0.00260	0.63391	1073.5	8.1	1103.0	14.0	996	13	1103.0	14.0	2.7	Single Age
12WPY32_107	133.70	0.69	6.29100	0.05000	0.37330	0.00250	0.48262	2016.8	6.9	2045.0	12.0	1978	7	1977.5	6.5	3.4	Single Age
12WPY32_108	72.00	1.79	1.50600	0.04800	0.15470	0.00310	0.90520	929.0	20.0	927.0	17.0	933	23	927.0	17.0	0.2	Single Age
12WPY32_109	392.00	0.71	13.62000	0.17000	0.51580	0.00470	0.35071	2723.0	12.0	2681.0	20.0	2733	20	2733.0	20.0	1.9	Single Age
12WPY32_110	611.00	0.98	0.83440	0.00840	0.10150	0.00100	0.65975	615.9	4.7	623.4	5.9	583	12	623.4	5.9	1.2	Single Age
12WPY32_111	228.70	0.68	5.13900	0.08700	0.31660	0.00550	0.80886	1843.0	14.0	1776.0	26.0	1907	11	1907.0	11.0	6.9	Single Age
12WPY32_112	181.00	1.07	1.62100	0.01700	0.16270	0.00150	0.58076	978.2	6.6	971.6	8.4	990	11	971.6	8.4	0.7	Single Age
12WPY32_113	123.50	0.83	5.94300	0.05900	0.34900	0.00260	0.57718	1966.9	8.7	1931.0	13.0	2013	7	2012.6	6.6	4.1	Single Age
12WPY32_114	405.50	4.35	1.02400	0.01900	0.11930	0.00160	0.88745	716.1	9.3	726.3	9.1	686	8	726.3	9.1	1.4	Single Age
12WPY32_115	179.40	1.03	0.95990	0.00970	0.11208	0.00097	0.33670	683.0	5.0	684.8	5.6	659	13	684.8	5.6	0.3	Single Age
12WPY32_116	110.50	0.81	12.37000	0.11000	0.50200	0.00450	0.51621	2632.3	8.1	2622.0	19.0	2610	8	2609.7	7.7	0.5	Single Age
12WPY32_117	420.00	1.03	1.56300	0.03300	0.14620	0.00290	0.94071	954.0	13.0	879.0	16.0	1046	7	879.0	16.0	7.9	Single Age
12WPY32_118	68.40	3.19	1.01100	0.02000	0.11440	0.00160	0.66196	710.3	9.8	698.3	9.3	756	17	698.3	9.3	1.7	Single Age
12WPY32_119	229.00	3.34	0.87300	0.01100	0.10550	0.00130	0.59208	637.3	5.6	646.7	7.3	597	12	646.7	7.3	1.5	Single Age
12WPY32_120	19.00	1.13	1.74500	0.03000	0.16880	0.00200	0.33419	1024.0	11.0	1005.0	11.0	1069	18	1005.0	11.0	1.9	Single Age
12WPY32_121	620.00	1.95	0.93800	0.02700	0.11190	0.00250	0.95011	670.0	14.0	683.0	14.0	617	11	683.0	14.0	1.9	Single Age
12WPY32_122	189.00	0.74	0.90500	0.01500	0.10840	0.00140	0.72295	654.1	7.9	663.7	8.0	652	11	663.7	8.0	1.5	Single Age
12WPY32_123	438.00	3.54	0.77720	0.00700	0.09660	0.00075	0.48588	583.7	4.0	594.5	4.4	543	8	594.5	4.4	1.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY32_124	119.00	1.02	0.82600	0.01400	0.09949	0.00098	0.55321	611.0	7.9	611.4	5.7	596	17	611.4	5.7	0.1	Single Age
12WPY33_1	140.00	0.59	0.81500	0.02000	0.09387	0.00088	0.10138	607.0	11.0	578.4	5.2	694	43	578.4	5.2	4.7	Single Age
12WPY33_2	315.00	13.70	1.52100	0.01500	0.15190	0.00130	0.78668	938.8	6.1	911.6	7.3	994	9	911.6	7.3	2.9	Single Age
12WPY33_3	80.60	1.11	1.62400	0.01400	0.16120	0.00100	0.43514	980.2	5.2	963.6	5.7	1021	11	963.6	5.7	1.7	Single Age
12WPY33_4	285.00	1.21	0.90620	0.00590	0.10614	0.00062	0.60945	654.9	3.2	650.2	3.6	673	7	650.2	3.6	0.7	Single Age
12WPY33_5	218.00	1.14	0.96310	0.00880	0.10779	0.00083	0.63509	684.7	4.6	659.8	4.8	764	8	659.8	4.8	3.6	Single Age
12WPY33_6	387.00	4.16	0.79100	0.01300	0.09290	0.00110	0.75364	591.5	7.4	572.8	6.5	665	17	572.8	6.5	3.2	Single Age
12WPY33_7	139.00	1.34	5.24000	0.11000	0.30160	0.00590	0.96537	1857.0	18.0	1698.0	29.0	2038	7	2038.3	6.6	16.7	Single Age
12WPY33_8	214.00	0.93	0.61880	0.00600	0.07704	0.00065	0.54883	488.9	3.8	478.4	3.9	527	12	478.4	3.9	2.1	Single Age
12WPY33_9	441.00	1.80	6.46500	0.05000	0.35010	0.00330	0.89097	2040.8	6.8	1935.0	16.0	2149	5	2148.5	4.8	9.9	Single Age
12WPY33_10	271.00	1.35	0.81500	0.01300	0.09600	0.00089	0.02637	602.9	6.3	590.9	5.2	662	19	590.9	5.2	2.0	Single Age
12WPY33_11	140.40	0.78	1.50500	0.01200	0.14990	0.00110	0.51729	932.4	4.8	900.5	6.3	1004	8	900.5	6.3	3.4	Single Age
12WPY33_12	201.00	1.00	1.51100	0.01200	0.15280	0.00120	0.73105	935.3	5.1	916.8	6.8	975	9	916.8	6.8	2.0	Single Age
12WPY33_13	10.50	0.88	1.06000	0.04800	0.07460	0.00320	0.49657	729.0	24.0	463.0	19.0	1722	53	DISC	DISC	36.5	Single Age
12WPY33_14	294.00	1.68	1.28100	0.04800	0.13420	0.00400	0.98130	834.0	22.0	811.0	23.0	899	17	811.0	23.0	2.8	Single Age
12WPY33_15	96.00	2.60	2.72300	0.07600	0.16690	0.00280	0.72022	1333.0	21.0	995.0	16.0	1891	23	DISC	DISC	25.4	Single Age
12WPY33_16	305.80	6.47	0.79200	0.01200	0.09310	0.00140	0.90920	592.0	7.1	573.8	8.4	661	8	573.8	8.4	3.1	Single Age
12WPY33_17	251.00	2.44	1.70700	0.02500	0.16980	0.00240	0.93019	1010.1	9.4	1011.0	13.0	1005	9	1011.0	13.0	0.1	Single Age
12WPY33_18	937.00	3.48	4.31200	0.08400	0.26470	0.00510	0.97401	1695.0	16.0	1519.0	24.0	1910	7	1909.7	7.0	20.5	Single Age
12WPY33_19	266.00	2.66	1.41100	0.01100	0.14520	0.00120	0.71630	893.3	4.6	874.0	7.0	938	9	874.0	7.0	2.2	Single Age
12WPY33_20	416.00	2.29	0.95150	0.00700	0.10864	0.00099	0.70109	679.2	3.6	664.8	5.7	723	6	664.8	5.7	2.1	Single Age
12WPY33_21	95.40	1.77	10.48000	0.25000	0.43590	0.00840	0.98755	2468.0	27.0	2330.0	38.0	2590	13	2590.0	13.0	10.0	Single Age
12WPY33_22	156.00	1.16	4.34500	0.03600	0.28310	0.00220	0.77706	1701.6	6.9	1607.0	11.0	1812	6	1811.5	6.4	11.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY33_23	1016.00	10.50	14.57000	0.27000	0.48860	0.00680	0.96623	2786.0	18.0	2564.0	30.0	2954	9	2953.7	9.3	13.2	Single Age
12WPY33_24	287.00	1.61	1.18500	0.01100	0.12600	0.00130	0.80880	793.2	5.3	765.1	7.4	878	7	765.1	7.4	3.5	Single Age
12WPY33_25	494.00	0.85	0.79490	0.00910	0.09250	0.00130	0.75887	593.9	5.1	570.2	7.9	688	13	570.2	7.9	4.0	Single Age
12WPY33_26	56.50	1.25	10.28000	0.36000	0.41700	0.01300	0.96173	2454.0	34.0	2251.0	57.0	2629	15	2629.0	15.0	14.4	Single Age
12WPY33_27	455.00	1.63	1.02600	0.02600	0.11510	0.00220	0.95667	717.0	13.0	702.0	13.0	776	16	702.0	13.0	2.1	Single Age
12WPY33_28	417.00	5.20	0.92300	0.01900	0.10470	0.00160	0.89744	663.0	10.0	641.5	9.3	745	15	641.5	9.3	3.2	Single Age
12WPY33_29	290.00	2.61	0.84560	0.00930	0.10019	0.00087	0.70221	622.0	5.1	615.5	5.1	645	8	615.5	5.1	1.0	Single Age
12WPY33_30	134.80	0.99	3.61800	0.09100	0.24960	0.00480	0.94880	1552.0	20.0	1436.0	25.0	1718	14	1718.0	14.0	16.4	Single Age
12WPY33_31	603.80	0.74	8.44400	0.08400	0.35530	0.00300	0.79392	2279.5	9.1	1960.0	14.0	2585	8	2585.2	7.7	24.2	Single Age
12WPY33_32	190.00	1.16	0.99600	0.01200	0.11400	0.00150	0.76929	701.4	5.9	696.0	8.7	728	12	696.0	8.7	0.8	Single Age
12WPY33_33	94.90	2.31	1.13400	0.01600	0.12520	0.00150	0.63769	770.2	7.6	760.2	8.4	797	14	760.2	8.4	1.3	Single Age
12WPY33_34	130.90	35.40	0.84700	0.03300	0.09580	0.00110	0.64475	629.0	19.0	589.6	6.5	771	64	589.6	6.5	6.3	Single Age
12WPY33_35	1570.00	3.82	0.73010	0.00650	0.08835	0.00082	0.85323	557.0	3.9	545.7	4.9	601	6	545.7	4.9	2.0	Single Age
12WPY33_36	163.00	2.63	0.88910	0.00710	0.10490	0.00100	0.45508	645.7	3.8	643.2	5.9	663	14	643.2	5.9	0.4	Single Age
12WPY33_37	343.00	9.60	1.09400	0.04700	0.12300	0.00430	0.97497	748.0	22.0	747.0	24.0	734	15	747.0	24.0	0.1	Single Age
12WPY33_38	395.00	3.02	0.82720	0.00690	0.09810	0.00066	0.78994	612.4	3.8	603.3	3.9	645	7	603.3	3.9	1.5	Single Age
12WPY33_39	77.20	0.45	6.13600	0.04400	0.34810	0.00270	0.68734	1995.0	6.2	1925.0	13.0	2076	7	2076.1	6.5	7.3	Single Age
12WPY33_40	107.30	1.42	0.82700	0.01200	0.09734	0.00083	0.06055	611.6	6.8	598.8	4.9	653	21	598.8	4.9	2.1	Single Age
12WPY33_41	630.00	3.11	0.80500	0.01100	0.09410	0.00140	0.92650	599.2	6.1	579.4	8.0	666	6	579.4	8.0	3.3	Single Age
12WPY33_42	590.00	3.98	1.79500	0.04400	0.16360	0.00250	0.75091	1044.0	16.0	976.0	14.0	1183	31	976.0	14.0	6.5	Single Age
12WPY33_43	130.10	1.26	4.82400	0.08200	0.29530	0.00530	0.64912	1787.0	14.0	1667.0	26.0	1941	16	1941.0	16.0	14.1	Single Age
12WPY33_44	129.80	0.81	1.58500	0.01600	0.15670	0.00140	0.91351	964.0	6.4	938.4	7.8	1020	7	938.4	7.8	2.7	Single Age
12WPY33_45	459.00	0.97	0.79160	0.00580	0.09398	0.00061	0.73334	592.4	3.2	579.0	3.6	645	6	579.0	3.6	2.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY33_46	420.00	1.81	0.74220	0.00730	0.09074	0.00092	0.78342	563.5	4.2	559.9	5.4	575	6	559.9	5.4	0.6	Single Age
12WPY33_47	167.30	0.70	1.08020	0.00990	0.11040	0.00110	0.71191	743.6	4.9	674.8	6.5	942	9	674.8	6.5	9.3	Single Age
12WPY33_48	119.00	1.46	8.17900	0.09200	0.34950	0.00320	0.73526	2251.0	10.0	1932.0	15.0	2556	10	2556.3	9.7	24.4	Single Age
12WPY33_49	142.50	1.00	0.80010	0.00800	0.09522	0.00091	0.59498	597.4	4.4	586.3	5.4	631	11	586.3	5.4	1.9	Single Age
12WPY33_50	270.00	4.92	1.03900	0.02000	0.11670	0.00190	0.90709	722.0	10.0	711.0	11.0	739	11	711.0	11.0	1.5	Single Age
12WPY33_51	219.80	0.77	0.77800	0.01500	0.08900	0.00180	0.22953	584.0	8.4	550.0	11.0	731	27	550.0	11.0	5.8	Single Age
12WPY33_52	522.00	11.50	1.45080	0.00900	0.14370	0.00100	0.87098	909.1	4.2	865.4	5.8	1008	11	865.4	5.8	4.8	Single Age
12WPY33_53	154.30	1.35	0.86590	0.00840	0.09883	0.00085	0.67433	633.1	4.6	607.5	5.0	723	9	607.5	5.0	4.0	Single Age
12WPY33_54	809.30	1.19	1.00440	0.00930	0.11330	0.00100	0.90344	705.8	4.7	692.1	6.0	744	5	692.1	6.0	1.9	Single Age
12WPY33_55	47.60	14.90	0.85000	0.03000	0.09080	0.00300	0.58544	624.0	17.0	560.0	18.0	836	40	DISC	DISC	10.3	Rim
12WPY33_55	110.00	1.16	1.34900	0.01700	0.14120	0.00150	0.66172	866.9	7.3	851.2	8.2	904	10	851.2	8.2	1.8	Core
12WPY33_56	236.80	2.99	0.62150	0.00460	0.07789	0.00065	0.68682	490.7	2.9	483.5	3.9	525	9	483.5	3.9	1.5	Single Age
12WPY33_57	1101.00	2.86	5.01500	0.03900	0.30950	0.00310	0.82886	1821.6	6.6	1738.0	15.0	1915	6	1915.1	5.5	9.2	Single Age
12WPY33_58	102.80	0.46	1.69000	0.01300	0.16600	0.00120	0.37115	1004.6	5.1	989.9	6.7	1031	8	989.9	6.7	1.5	Single Age
12WPY33_59	243.00	0.77	1.56210	0.00920	0.15822	0.00098	0.64616	955.6	3.6	946.8	5.5	977	7	946.8	5.5	0.9	Single Age
12WPY33_60	56.10	0.63	1.34600	0.02000	0.14130	0.00150	0.32431	865.5	8.8	852.2	8.3	885	16	852.2	8.3	1.5	Single Age
12WPY33_61	386.00	1.64	1.44100	0.01400	0.14840	0.00130	0.88621	905.9	5.8	891.7	7.5	937	5	891.7	7.5	1.6	Single Age
12WPY33_62	1594.00	2.12	7.46000	0.05800	0.37970	0.00330	0.90228	2167.7	7.0	2074.0	15.0	2256	4	2255.9	4.2	8.1	Single Age
12WPY33_63	46.82	1.02	1.49300	0.02300	0.14870	0.00170	0.46426	927.1	9.5	893.8	9.6	1006	13	893.8	9.6	3.6	Single Age
12WPY33_64	35.20	1.44	1.42000	0.03200	0.14370	0.00170	0.10169	898.0	13.0	865.6	9.7	972	40	865.6	9.7	3.6	Single Age
12WPY33_65	218.80	1.03	1.32400	0.01200	0.13720	0.00110	0.66442	857.3	5.2	828.5	6.0	927	10	828.5	6.0	3.4	Single Age
12WPY33_66	162.10	3.60	11.71000	0.12000	0.47000	0.00450	0.76581	2580.6	9.9	2486.0	19.0	2658	9	2658.0	9.2	6.5	Single Age
12WPY33_67	337.00	2.89	6.48600	0.07400	0.35300	0.00520	0.88283	2044.0	10.0	1952.0	24.0	2135	9	2134.9	9.4	8.6	Single Age

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12WPY33_68	250.00	1.37	1.55500	0.02300	0.15680	0.00190	0.86129	952.0	9.0	939.0	10.0	978	8	939.0	10.0	1.4	Single Age
12WPY33_69	237.00	1.41	2.06700	0.02800	0.18620	0.00210	0.82991	1139.1	8.9	1101.0	12.0	1208	9	1101.0	12.0	3.3	Single Age
12WPY33_70	178.00	1.25	0.68780	0.00570	0.08447	0.00054	0.25821	531.4	3.4	522.7	3.2	570	15	522.7	3.2	1.6	Single Age
12WPY33_71	341.00	3.23	2.66000	0.02800	0.22210	0.00260	0.92004	1317.9	7.6	1295.0	14.0	1360	5	1359.7	4.8	4.8	Single Age
12WPY33_72	87.40	1.25	5.11500	0.04500	0.31870	0.00270	0.71435	1838.1	7.4	1783.0	13.0	1899	7	1898.7	6.7	6.1	Single Age
12WPY33_74	541.00	20.40	0.84910	0.00780	0.09918	0.00070	0.37170	624.1	4.3	609.6	4.1	682	10	609.6	4.1	2.3	Single Age
12WPY33_75	232.60	2.77	1.65500	0.06100	0.16550	0.00550	0.98590	986.0	24.0	986.0	30.0	972	15	986.0	30.0	0.0	Single Age
12WPY33_76	976.00	3.11	0.65060	0.00400	0.07950	0.00043	0.70602	508.8	2.4	493.1	2.6	568	5	493.1	2.6	3.1	Single Age
12WPY33_77	171.90	1.77	6.00200	0.02800	0.33870	0.00200	0.48570	1976.0	4.1	1880.5	9.4	2074	5	2074.4	5.2	9.3	Single Age
12WPY33_78	324.00	1.77	10.07000	0.13000	0.41290	0.00520	0.71324	2440.0	12.0	2228.0	24.0	2627	13	2627.0	13.0	15.2	Single Age
12WPY33_79	388.10	54.00	0.81230	0.00560	0.09599	0.00067	0.71333	604.0	3.2	590.9	3.9	651	7	590.9	3.9	2.2	Single Age
12WPY33_80	127.80	0.95	1.66600	0.02300	0.16250	0.00200	0.81680	994.9	8.8	972.0	11.0	1037	9	972.0	11.0	2.3	Single Age
12WPY33_81	132.90	4.55	0.82620	0.00820	0.09763	0.00089	0.47547	611.3	4.6	600.4	5.2	647	12	600.4	5.2	1.8	Single Age
12WPY33_82	114.00	1.19	0.87900	0.02900	0.10560	0.00280	0.73663	640.0	16.0	647.0	16.0	624	16	647.0	16.0	1.1	Rim
12WPY33_82	89.40	1.42	11.38000	0.25000	0.42010	0.00790	0.94085	2553.0	21.0	2260.0	36.0	2792	10	2792.1	9.6	19.1	Core
12WPY33_83	61.90	0.70	1.62200	0.04400	0.15350	0.00220	0.72773	976.0	16.0	922.0	13.0	1088	29	922.0	13.0	5.5	Single Age
12WPY33_84	116.60	1.30	10.25000	0.14000	0.44070	0.00600	0.92750	2458.0	12.0	2353.0	27.0	2537	5	2537.0	4.8	7.3	Single Age
12WPY33_85	48.30	1.06	1.62500	0.02000	0.15810	0.00150	0.40635	979.3	7.8	945.9	8.5	1053	16	945.9	8.5	3.4	Single Age
12WPY33_86	89.80	0.83	0.91400	0.02600	0.09896	0.00071	0.25848	657.0	13.0	608.3	4.2	830	55	608.3	4.2	7.4	Single Age
12WPY33_87	119.50	0.69	2.73600	0.02400	0.21880	0.00200	0.71789	1337.8	6.6	1276.0	10.0	1427	9	1426.5	8.5	10.6	Single Age
12WPY33_88	135.00	1.46	0.73340	0.00780	0.09041	0.00077	0.61408	559.0	4.5	557.9	4.6	558	12	557.9	4.6	0.2	Single Age
12WPY33_89	412.00	7.35	1.04000	0.04400	0.11370	0.00330	0.97515	721.0	22.0	694.0	19.0	799	31	694.0	19.0	3.7	Single Age
12WPY33_90	557.00	2.65	1.47900	0.03200	0.14660	0.00310	0.78955	921.0	13.0	882.0	17.0	1018	17	882.0	17.0	4.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY33_91	96.80	1.02	6.12700	0.07600	0.34770	0.00400	0.86793	1994.0	11.0	1923.0	19.0	2064	6	2064.0	5.7	6.8	Single Age
12WPY33_92	37.80	0.59	1.54100	0.04400	0.15010	0.00410	0.66505	944.0	17.0	901.0	23.0	1050	25	901.0	23.0	4.6	Single Age
12WPY33_93	95.00	1.07	0.92200	0.00910	0.10745	0.00077	0.26350	663.2	4.8	657.9	4.5	677	15	657.9	4.5	0.8	Single Age
12WPY33_94	336.00	4.08	1.68700	0.01400	0.16660	0.00120	0.80807	1004.8	5.3	993.5	6.7	1027	7	993.5	6.7	1.1	Single Age
12WPY33_95	421.00	2.15	0.95000	0.01500	0.10940	0.00160	0.80108	677.8	7.6	669.3	9.4	690	12	669.3	9.4	1.3	Single Age
12WPY33_96	43.20	0.73	5.59200	0.04800	0.33350	0.00250	0.23337	1915.3	7.2	1855.0	12.0	1976	10	1975.9	9.7	6.1	Single Age
12WPY33_97	274.50	12.99	0.66440	0.00560	0.08171	0.00057	0.59156	517.2	3.4	506.3	3.4	555	8	506.3	3.4	2.1	Single Age
12WPY33_98	161.00	0.61	0.86620	0.00970	0.10066	0.00084	0.45846	633.2	5.3	618.2	4.9	679	16	618.2	4.9	2.4	Single Age
12WPY33_99	187.00	0.79	1.51500	0.02300	0.14880	0.00200	0.73437	936.0	9.3	894.0	11.0	1030	12	894.0	11.0	4.5	Single Age
12WPY33_100	119.60	1.04	1.45200	0.01500	0.14800	0.00150	0.66264	910.5	6.3	889.8	8.2	954	8	889.8	8.2	2.3	Single Age
12WPY33_101	479.00	6.95	1.01800	0.01700	0.11570	0.00180	0.93683	712.0	8.6	706.0	10.0	724	8	706.0	10.0	0.8	Single Age
12WPY33_102	68.80	1.00	1.77300	0.02700	0.17380	0.00240	0.48558	1037.1	9.3	1033.0	13.0	1021	18	1033.0	13.0	0.4	Single Age
12WPY33_103	601.00	2.04	1.84000	0.01500	0.17440	0.00150	0.81172	1059.7	5.2	1036.2	8.0	1101	5	1036.2	8.0	2.2	Single Age
12WPY33_104	52.10	0.54	1.41300	0.02000	0.14540	0.00150	0.40734	893.9	8.4	875.3	8.4	931	17	875.3	8.4	2.1	Single Age
12WPY33_105	84.40	1.06	0.90200	0.01200	0.10651	0.00097	0.49310	652.7	6.4	652.4	5.6	662	16	652.4	5.6	0.0	Single Age
12WPY33_106	178.70	0.81	4.53500	0.02600	0.28880	0.00200	0.59081	1737.1	4.9	1635.7	9.8	1860	6	1860.3	6.0	12.1	Single Age
12WPY33_107	870.00	2.29	0.95100	0.04000	0.09440	0.00120	0.10686	676.0	21.0	581.5	6.9	975	84	DISC	DISC	14.0	Single Age
12WPY33_108	313.00	1.45	1.53010	0.00870	0.15406	0.00090	0.61667	942.9	3.4	923.7	5.0	989	7	923.7	5.0	2.0	Single Age
12WPY33_109	17.80	1.68	1.42500	0.02900	0.14190	0.00190	0.50405	898.0	12.0	855.0	11.0	1006	17	855.0	11.0	4.8	Single Age
12WPY33_110	429.00	1.81	0.70840	0.00910	0.08600	0.00100	0.71863	543.5	5.4	531.7	5.9	589	9	531.7	5.9	2.2	Single Age
12WPY33_111	306.00	1.14	1.52000	0.01700	0.14810	0.00160	0.89178	939.0	6.9	890.2	9.1	1050	7	890.2	9.1	5.2	Single Age
12WPY33_112	675.00	2.36	0.82500	0.00740	0.09588	0.00086	0.56271	610.8	4.1	590.2	5.0	682	12	590.2	5.0	3.4	Single Age
12WPY33_113	171.20	0.85	0.85400	0.01900	0.09771	0.00075	0.66175	626.0	10.0	600.9	4.4	720	34	600.9	4.4	4.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY33_114	108.50	1.06	9.47000	0.10000	0.42020	0.00480	0.84355	2383.6	9.7	2261.0	22.0	2491	6	2490.7	5.7	9.2	Single Age
12WPY33_115	183.10	1.89	0.84710	0.00870	0.09971	0.00073	0.41903	621.7	4.3	612.7	4.3	658	16	612.7	4.3	1.4	Single Age
12WPY33_116	185.00	1.26	9.63000	0.13000	0.39540	0.00620	0.64802	2399.0	12.0	2147.0	28.0	2606	13	2606.0	13.0	17.6	Single Age
12WPY33_118	183.00	13.60	0.83700	0.01200	0.09795	0.00099	0.75552	617.7	6.8	602.3	5.8	671	14	602.3	5.8	2.5	Single Age
12WPY33_119	103.90	3.02	11.99000	0.27000	0.49100	0.01300	0.94709	2602.0	21.0	2572.0	56.0	2628	9	2628.0	8.9	2.1	Single Age
12WPY33_120	63.10	1.09	8.77200	0.09400	0.39590	0.00370	0.76699	2314.0	9.7	2153.0	18.0	2457	6	2457.0	5.8	12.4	Single Age
12WPY35_1	552.10	9.88	1.00700	0.01200	0.11610	0.00120	0.80327	707.1	6.1	707.8	7.1	716	12	707.8	7.1	0.1	Single Age
12WPY35_2	160.90	0.32	0.83200	0.01000	0.09731	0.00099	0.41658	614.6	5.6	598.6	5.8	679	21	598.6	5.8	2.6	Single Age
12WPY35_3	854.00	1.31	0.95010	0.00670	0.10945	0.00088	0.72030	678.0	3.5	669.5	5.1	702	9	669.5	5.1	1.3	Single Age
12WPY35_4	221.00	0.70	0.90510	0.00750	0.10499	0.00078	0.35419	654.3	4.0	643.6	4.6	686	12	643.6	4.6	1.6	Single Age
12WPY35_5	949.00	1.71	1.26140	0.00820	0.13690	0.00100	0.74537	828.4	3.7	827.3	5.8	828	5	827.3	5.8	0.1	Single Age
12WPY35_6	83.60	0.41	1.80500	0.03500	0.17680	0.00370	0.85365	1050.0	13.0	1049.0	21.0	1064	13	1049.0	21.0	0.1	Single Age
12WPY35_7	576.00	4.10	0.86230	0.00950	0.10020	0.00110	0.80429	631.7	5.2	615.6	6.2	678	7	615.6	6.2	2.5	Single Age
12WPY35_8	353.00	1.56	1.01800	0.01100	0.11450	0.00120	0.82190	712.6	5.5	698.7	6.8	757	9	698.7	6.8	2.0	Single Age
12WPY35_9	370.00	1.16	5.25000	0.23000	0.29200	0.01300	0.98886	1854.0	39.0	1648.0	64.0	2096	8	2096.2	7.5	21.4	Single Age
12WPY35_10	542.00	0.80	0.78700	0.02500	0.09460	0.00330	0.96370	588.0	14.0	582.0	19.0	614	17	582.0	19.0	1.0	Single Age
12WPY35_11	296.00	3.86	0.81560	0.00780	0.09607	0.00093	0.67262	605.4	4.4	591.3	5.5	654	9	591.3	5.5	2.3	Single Age
12WPY35_12	587.00	6.41	0.85800	0.01000	0.09990	0.00130	0.84861	628.7	5.6	613.7	7.3	676	8	613.7	7.3	2.4	Single Age
12WPY35_13	19.60	0.76	0.97900	0.01900	0.11040	0.00140	0.22735	692.1	9.8	674.7	8.4	747	21	674.7	8.4	2.5	Single Age
12WPY35_14	425.30	1.67	0.84300	0.00930	0.09801	0.00086	0.70040	620.5	5.1	602.7	5.0	680	11	602.7	5.0	2.9	Single Age
12WPY35_16	626.00	2.03	0.87200	0.01500	0.10100	0.00160	0.86206	635.8	8.3	620.3	9.5	719	13	620.3	9.5	2.4	Single Age
12WPY35_17	327.00	1.80	18.74000	0.58000	0.55900	0.01100	0.93241	3021.0	30.0	2867.0	48.0	3133	20	3133.0	20.0	8.5	Single Age
12WPY35_18	291.20	5.38	5.41000	0.21000	0.26260	0.00770	0.97280	1890.0	31.0	1508.0	38.0	2334	17	DISC	DISC	35.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY35_19	292.00	14.40	5.87000	0.15000	0.33210	0.00560	0.90451	1952.0	22.0	1847.0	27.0	2064	18	2064.0	18.0	10.5	Single Age
12WPY35_20	482.00	1.29	6.55000	0.11000	0.35380	0.00520	0.94248	2051.0	15.0	1952.0	25.0	2156	5	2155.8	5.4	9.5	Single Age
12WPY35_21	298.00	0.54	0.94640	0.00820	0.11116	0.00087	0.66880	676.1	4.3	679.4	5.0	664	10	679.4	5.0	0.5	Single Age
12WPY35_22	155.90	4.03	1.01900	0.01100	0.11594	0.00079	0.47548	713.2	5.7	707.1	4.6	736	10	707.1	4.6	0.9	Single Age
12WPY35_23	84.00	0.42	0.90900	0.02100	0.10930	0.00240	0.87640	657.0	11.0	668.0	14.0	622	15	668.0	14.0	1.7	Single Age
12WPY35_24	129.20	1.89	10.51000	0.19000	0.44040	0.00750	0.93312	2480.0	17.0	2351.0	34.0	2599	6	2599.3	6.1	9.6	Single Age
12WPY35_25	426.00	2.29	2.54100	0.04200	0.18000	0.00240	0.89066	1284.0	12.0	1067.0	13.0	1670	9	DISC	DISC	16.9	Single Age
12WPY35_26	655.00	21.50	3.56100	0.06700	0.23440	0.00350	0.85641	1542.0	15.0	1357.0	18.0	1809	12	1809.0	12.0	25.0	Single Age
12WPY35_28	357.00	1.55	4.85900	0.05500	0.29070	0.00310	0.82249	1794.7	9.5	1645.0	16.0	1977	7	1977.3	7.2	16.8	Single Age
12WPY35_29	15.70	1.83	10.46000	0.19000	0.43440	0.00630	0.76388	2474.0	17.0	2325.0	28.0	2604	12	2604.0	12.0	10.7	Single Age
12WPY35_30	88.60	1.23	0.86100	0.01200	0.10220	0.00110	0.22930	630.3	6.8	627.4	6.5	633	19	627.4	6.5	0.5	Single Age
12WPY35_31	459.40	0.75	3.65900	0.06000	0.23510	0.00360	0.85593	1563.0	13.0	1361.0	19.0	1847	11	1847.0	11.0	26.3	Single Age
12WPY35_32	594.40	29.60	4.86200	0.06300	0.30570	0.00280	0.78457	1796.0	11.0	1719.0	14.0	1887	11	1887.0	11.0	8.9	Single Age
12WPY35_33	662.00	14.50	0.84810	0.00900	0.10020	0.00120	0.82434	623.4	4.9	615.3	6.8	658	8	615.3	6.8	1.3	Single Age
12WPY35_34	473.00	2.03	0.75990	0.00700	0.09138	0.00086	0.53360	573.8	4.0	563.7	5.1	626	11	563.7	5.1	1.8	Single Age
12WPY35_35	327.00	2.09	1.21400	0.01100	0.13190	0.00130	0.74101	806.8	4.9	798.4	7.7	829	8	798.4	7.7	1.0	Single Age
12WPY35_36	295.00	7.40	0.87150	0.00950	0.10427	0.00090	0.59722	636.2	5.1	639.4	5.3	648	13	639.4	5.3	0.5	Single Age
12WPY35_37	294.00	1.57	5.27000	0.13000	0.30560	0.00720	0.96725	1860.0	22.0	1721.0	35.0	2032	8	2031.9	7.8	15.3	Single Age
12WPY35_38	34.10	0.78	1.24300	0.02400	0.13150	0.00190	0.62504	821.0	11.0	796.0	11.0	889	22	796.0	11.0	3.0	Single Age
12WPY35_39	229.90	0.81	0.67260	0.00560	0.08420	0.00063	0.47698	522.2	3.4	521.1	3.7	542	11	521.1	3.7	0.2	Single Age
12WPY35_40	1026.00	1.95	1.15400	0.08700	0.11520	0.00180	0.98093	770.0	30.0	703.0	10.0	946	67	703.0	10.0	8.7	Single Age
12WPY35_41	296.00	2.19	0.88800	0.02300	0.10480	0.00210	0.53861	645.0	12.0	642.0	12.0	669	18	642.0	12.0	0.5	Single Age
12WPY35_42	90.00	1.57	1.37400	0.04600	0.14570	0.00290	0.44175	877.0	20.0	879.0	16.0	921	25	879.0	16.0	0.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY35_43	770.00	3.01	0.92860	0.00960	0.10680	0.00100	0.65737	668.2	5.3	653.9	6.0	721	12	653.9	6.0	2.1	Single Age
12WPY35_44	225.90	1.28	1.48200	0.02100	0.14950	0.00180	0.71445	923.7	8.6	898.0	10.0	984	11	898.0	10.0	2.8	Single Age
12WPY35_45	299.00	1.51	0.95180	0.00920	0.11060	0.00110	0.50933	679.4	4.8	676.1	6.6	679	13	676.1	6.6	0.5	Single Age
12WPY35_46	209.00	9.60	1.07200	0.03000	0.12180	0.00290	0.94350	739.0	15.0	740.0	17.0	742	12	740.0	17.0	0.1	Single Age
12WPY35_47	228.00	1.41	1.06950	0.00830	0.12120	0.00110	0.56987	738.3	4.0	738.1	6.2	758	10	738.1	6.2	0.0	Single Age
12WPY35_48	650.00	2.56	6.07000	0.11000	0.33140	0.00620	0.90511	1985.0	16.0	1845.0	30.0	2133	7	2133.4	6.8	13.5	Single Age
12WPY35_49	295.50	8.18	4.36000	0.14000	0.27400	0.00670	0.91527	1709.0	25.0	1560.0	34.0	1899	15	1899.0	15.0	17.9	Single Age
12WPY35_50	33.10	0.85	1.03000	0.03500	0.11840	0.00310	0.54263	716.0	17.0	721.0	18.0	734	31	721.0	18.0	0.7	Single Age
12WPY35_51	299.00	0.76	1.37000	0.01600	0.14000	0.00140	0.66516	876.0	7.0	844.8	8.1	957	14	844.8	8.1	3.6	Single Age
12WPY35_52	654.00	1.48	1.46300	0.01400	0.14950	0.00140	0.80833	914.9	5.9	897.9	7.6	953	5	897.9	7.6	1.9	Single Age
12WPY35_53	286.00	11.00	3.95000	0.05700	0.25810	0.00280	0.78310	1623.0	12.0	1480.0	14.0	1808	13	1808.0	13.0	18.1	Single Age
12WPY35_54	187.40	2.34	1.17500	0.01100	0.12690	0.00110	0.43927	788.6	4.9	769.9	6.2	840	12	769.9	6.2	2.4	Single Age
12WPY35_55	211.40	0.68	0.78860	0.00770	0.09470	0.00092	0.42077	590.7	4.5	583.2	5.4	612	16	583.2	5.4	1.3	Single Age
12WPY35_56	320.00	3.22	11.39500	0.09100	0.47120	0.00420	0.76946	2556.5	7.6	2488.0	18.0	2609	7	2608.9	6.8	4.6	Single Age
12WPY35_57	260.00	5.40	1.12700	0.03800	0.12570	0.00330	0.96383	765.0	18.0	763.0	19.0	773	15	763.0	19.0	0.3	Single Age
12WPY35_58	327.00	0.73	0.86020	0.00660	0.10127	0.00083	0.61644	630.1	3.6	621.8	4.9	656	9	621.8	4.9	1.3	Single Age
12WPY35_59	172.00	8.50	0.80100	0.01100	0.09660	0.00130	0.70709	597.1	6.1	595.2	7.3	617	11	595.2	7.3	0.3	Single Age
12WPY35_60	83.80	2.51	1.11200	0.01500	0.12280	0.00120	0.40905	760.3	6.8	746.4	6.9	801	17	746.4	6.9	1.8	Single Age
12WPY35_61	394.00	3.35	1.08200	0.06000	0.11880	0.00570	0.98809	736.0	29.0	722.0	33.0	792	17	722.0	33.0	1.9	Single Age
12WPY35_62	1712.00	40.60	0.85690	0.00460	0.10017	0.00058	0.65775	628.3	2.5	615.4	3.4	676	7	615.4	3.4	2.1	Single Age
12WPY35_63	543.00	7.90	3.36000	0.13000	0.22950	0.00590	0.97549	1498.0	30.0	1331.0	31.0	1726	26	1726.0	26.0	22.9	Single Age
12WPY35_64	182.00	2.21	1.46000	0.01800	0.14840	0.00170	0.60820	914.8	7.0	892.0	9.8	973	14	892.0	9.8	2.5	Single Age
12WPY35_65	2070.00	25.65	0.73690	0.00720	0.08727	0.00091	0.70876	560.5	4.2	539.4	5.4	642	10	539.4	5.4	3.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY35_66	81.00	1.58	6.56000	0.13000	0.30030	0.00550	0.79593	2052.0	17.0	1692.0	27.0	2443	13	DISC	DISC	30.7	Single Age
12WPY35_67	187.10	1.28	2.78300	0.08200	0.20600	0.00550	0.73645	1353.0	21.0	1212.0	28.0	1606	27	1606.0	27.0	24.5	Single Age
12WPY35_68	129.60	1.75	5.34100	0.03900	0.32290	0.00240	0.49646	1875.8	6.1	1804.0	12.0	1956	8	1955.5	8.4	7.7	Single Age
12WPY35_69	289.00	3.64	4.78000	0.15000	0.25330	0.00610	0.89004	1779.0	26.0	1455.0	31.0	2183	20	DISC	DISC	33.3	Single Age
12WPY35_70	299.00	1.46	2.26900	0.08100	0.16010	0.00200	0.81941	1198.0	26.0	957.0	11.0	1660	48	DISC	DISC	20.1	Single Age
12WPY35_71	126.00	0.78	0.65900	0.01100	0.08300	0.00100	0.50286	516.2	6.6	514.0	6.1	545	19	514.0	6.1	0.4	Single Age
12WPY35_72	68.50	0.58	0.87300	0.01600	0.10410	0.00180	0.65044	637.8	8.8	638.0	11.0	647	20	638.0	11.0	0.0	Single Age
12WPY35_73	102.40	0.74	1.77500	0.02200	0.17450	0.00200	0.57599	1035.6	8.0	1037.0	11.0	1055	13	1037.0	11.0	0.1	Single Age
12WPY35_74	339.00	3.14	1.06100	0.01000	0.11940	0.00120	0.62370	733.9	5.1	727.3	7.2	764	11	727.3	7.2	0.9	Single Age
12WPY35_75	156.00	1.81	5.60500	0.07100	0.33910	0.00400	0.73328	1916.0	11.0	1882.0	19.0	1946	9	1945.9	9.3	3.3	Single Age
12WPY35_76	503.00	1.06	0.88600	0.02900	0.10310	0.00330	0.96384	644.0	16.0	632.0	19.0	688	11	632.0	19.0	1.9	Single Age
12WPY35_77	90.20	1.02	1.08300	0.08100	0.12040	0.00630	0.97794	730.0	39.0	731.0	36.0	723	50	731.0	36.0	0.1	Single Age
12WPY35_78	446.00	2.75	0.76170	0.00630	0.09328	0.00084	0.70150	574.8	3.6	574.9	5.0	566	9	574.9	5.0	0.0	Single Age
12WPY35_79	126.00	0.77	0.81900	0.01000	0.09880	0.00130	0.31442	607.4	5.7	607.2	7.8	597	25	607.2	7.8	0.0	Single Age
12WPY35_80	65.20	0.42	1.44700	0.02700	0.14570	0.00170	0.54337	910.0	11.0	876.5	9.8	964	20	876.5	9.8	3.7	Single Age
12WPY35_81	97.50	1.35	1.22200	0.01300	0.13380	0.00120	0.56827	810.3	5.8	809.6	6.6	809	12	809.6	6.6	0.1	Single Age
12WPY35_82	83.50	0.95	4.88300	0.09600	0.31050	0.00720	0.86235	1797.0	17.0	1747.0	36.0	1870	13	1870.0	13.0	6.6	Single Age
12WPY35_83	467.00	2.33	1.40500	0.01500	0.14300	0.00120	0.77262	891.7	6.2	861.4	6.9	956	7	861.4	6.9	3.4	Single Age
12WPY35_84	640.00	2.09	0.76000	0.01400	0.09090	0.00190	0.93580	574.3	8.3	561.0	11.0	637	8	561.0	11.0	2.3	Single Age
12WPY35_85	243.00	0.50	0.87170	0.00930	0.09993	0.00096	0.59789	636.3	5.1	614.0	5.6	703	12	614.0	5.6	3.5	Single Age
12WPY35_86	126.40	1.40	1.26200	0.02100	0.13470	0.00190	0.72576	827.9	9.3	815.0	11.0	874	15	815.0	11.0	1.6	Single Age
12WPY35_87	67.80	0.78	5.34600	0.05600	0.32540	0.00330	0.60393	1875.7	8.9	1816.0	16.0	1934	11	1934.0	11.0	6.1	Single Age
12WPY35_88	195.00	2.79	1.65300	0.01300	0.16230	0.00130	0.54550	990.4	4.8	969.3	7.1	1028	8	969.3	7.1	2.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY35_89	218.00	0.68	9.85000	0.14000	0.40710	0.00550	0.90698	2419.0	13.0	2201.0	25.0	2607	7	2607.0	7.2	15.6	Single Age
12WPY35_90	252.30	1.15	1.76200	0.01800	0.17030	0.00170	0.53978	1032.3	6.4	1013.6	9.3	1063	13	1013.6	9.3	1.8	Single Age
12WPY35_91	126.10	1.63	1.60400	0.02700	0.15740	0.00270	0.84739	971.0	11.0	942.0	15.0	1034	10	942.0	15.0	3.0	Single Age
12WPY35_92	540.00	0.48	0.92000	0.01000	0.10480	0.00110	0.80014	662.0	5.4	642.6	6.2	722	11	642.6	6.2	2.9	Single Age
12WPY35_93	339.00	4.20	1.80200	0.04100	0.17430	0.00300	0.89613	1044.0	15.0	1035.0	17.0	1070	15	1035.0	17.0	0.9	Single Age
12WPY35_94	209.00	3.02	11.76000	0.24000	0.49000	0.01200	0.90470	2584.0	19.0	2567.0	53.0	2585	13	2585.0	13.0	0.7	Single Age
12WPY35_95	355.20	0.95	1.62200	0.02200	0.16000	0.00240	0.63625	980.1	8.3	957.0	13.0	1025	16	957.0	13.0	2.4	Single Age
12WPY35_96	263.00	1.01	7.94500	0.04900	0.36690	0.00270	0.49796	2225.3	5.8	2016.0	12.0	2432	7	2431.8	6.7	17.1	Single Age
12WPY35_97	154.00	180.00	0.82500	0.01300	0.09576	0.00099	0.50405	610.7	7.0	589.5	5.8	692	18	589.5	5.8	3.5	Single Age
12WPY35_98	252.80	2.51	0.85930	0.00970	0.10100	0.00110	0.52066	629.5	5.3	620.3	6.4	655	16	620.3	6.4	1.5	Single Age
12WPY35_99	175.00	0.69	5.41400	0.06900	0.32640	0.00400	0.80232	1887.0	11.0	1820.0	20.0	1953	14	1953.0	14.0	6.8	Single Age
12WPY35_100	493.00	2.84	3.32900	0.05700	0.23220	0.00460	0.81193	1487.0	13.0	1345.0	24.0	1667	17	1667.0	17.0	19.3	Single Age
12WPY35_101	182.00	2.97	5.15500	0.06500	0.31490	0.00440	0.80906	1846.0	10.0	1764.0	22.0	1940	9	1939.7	8.6	9.1	Single Age
12WPY35_102	34.70	3.82	6.66000	0.24000	0.33690	0.00760	0.89160	2062.0	32.0	1871.0	36.0	2262	28	2262.0	28.0	17.3	Single Age
12WPY35_103	680.00	4.84	0.89500	0.02700	0.10680	0.00340	0.95494	648.0	15.0	654.0	20.0	630	11	654.0	20.0	0.9	Single Age
12WPY35_104	158.00	2.67	1.04300	0.01700	0.11690	0.00190	0.23460	727.2	9.1	713.0	11.0	776	24	713.0	11.0	2.0	Single Age
12WPY35_105	340.00	3.94	0.86160	0.00910	0.10220	0.00120	0.80526	630.7	5.0	627.0	7.2	651	11	627.0	7.2	0.6	Single Age
12WPY35_106	204.50	1.20	0.91000	0.01400	0.10470	0.00140	0.62446	656.8	7.5	642.1	8.2	721	17	642.1	8.2	2.2	Single Age
12WPY35_107	238.00	7.89	0.82900	0.00900	0.09940	0.00110	0.55650	612.9	5.0	610.8	6.3	624	14	610.8	6.3	0.3	Single Age
12WPY35_108	186.00	2.74	0.97800	0.01300	0.11450	0.00130	0.68162	693.0	6.6	698.5	7.7	681	13	698.5	7.7	0.8	Single Age
12WPY35_109	148.20	0.77	5.07400	0.05900	0.31930	0.00390	0.83742	1835.4	9.4	1786.0	19.0	1888	6	1888.4	6.2	5.4	Single Age
12WPY35_110	113.20	0.61	1.78500	0.02400	0.17440	0.00220	0.67517	1039.6	8.6	1036.0	12.0	1048	9	1036.0	12.0	0.3	Single Age
12WPY35_111	62.00	0.40	4.86600	0.06200	0.31310	0.00380	0.70009	1796.0	11.0	1756.0	19.0	1847	10	1847.0	10.0	4.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY35_113	63.50	0.78	1.35300	0.06700	0.13220	0.00610	0.92775	869.0	30.0	799.0	35.0	1037	23	799.0	35.0	8.1	Single Age
12WPY35_114	221.10	1.66	0.84330	0.00830	0.09929	0.00078	0.57220	620.8	4.6	610.2	4.6	651	10	610.2	4.6	1.7	Single Age
12WPY35_115	28.44	1.26	0.63500	0.01800	0.07800	0.00180	0.32435	501.0	11.0	484.0	11.0	602	33	484.0	11.0	3.4	Single Age
12WPY35_116	219.00	0.83	0.81000	0.01200	0.09700	0.00120	0.64682	602.8	6.7	596.8	6.9	597	15	596.8	6.9	1.0	Single Age
12WPY35_117	165.00	1.46	1.64400	0.01700	0.16240	0.00120	0.39821	987.0	6.5	970.0	6.8	1034	15	970.0	6.8	1.7	Single Age
12WPY35_118	986.00	6.09	0.90600	0.01200	0.10280	0.00120	0.92942	654.8	6.5	630.9	6.8	733	6	630.9	6.8	3.6	Single Age
12WPY35_119	196.00	1.11	1.76200	0.02400	0.16910	0.00220	0.84860	1030.7	8.9	1007.0	12.0	1070	9	1007.0	12.0	2.3	Single Age
12WPY35_120	215.00	2.06	1.27250	0.00950	0.13699	0.00084	0.52776	833.3	4.3	827.6	4.7	848	9	827.6	4.7	0.7	Single Age
12WPY35_121	115.40	1.48	1.38500	0.02100	0.14330	0.00200	0.73102	883.6	9.3	863.0	11.0	929	12	863.0	11.0	2.3	Single Age
12WPY35_122	450.00	0.85	0.76400	0.01600	0.09290	0.00180	0.91366	575.3	9.1	572.0	10.0	591	12	572.0	10.0	0.6	Single Age
12WPY35_123	220.00	2.83	1.02700	0.01200	0.11710	0.00130	0.67078	717.8	5.9	713.7	7.5	719	12	713.7	7.5	0.6	Single Age
12WPY35_124	1780.00	54.30	0.82910	0.00550	0.09677	0.00089	0.71544	613.0	3.1	595.4	5.2	685	10	595.4	5.2	2.9	Single Age
12WPY35_125	134.10	1.50	1.48700	0.01200	0.15350	0.00130	0.46106	924.9	4.9	920.3	7.5	939	11	920.3	7.5	0.5	Single Age
12WPY36_1	997.00	1.71	0.92100	0.00740	0.10370	0.00110	0.41630	662.8	3.9	636.1	6.4	755	17	636.1	6.4	4.0	Rim
12WPY36_1	486.00	1.75	1.03700	0.03400	0.11220	0.00360	0.44468	722.0	17.0	685.0	21.0	839	58	685.0	21.0	5.1	Core
12WPY36_2	86.00	1.18	1.53500	0.02500	0.15720	0.00230	0.68745	944.9	9.8	942.0	13.0	956	15	942.0	13.0	0.3	Single Age
12WPY36_3	813.00	26.90	0.79700	0.01500	0.09160	0.00190	0.58799	594.9	8.6	565.0	11.0	711	26	565.0	11.0	5.0	Single Age
12WPY36_4	183.90	1.89	0.97000	0.01200	0.11300	0.00110	0.28411	687.9	6.1	689.9	6.2	669	11	689.9	6.2	0.3	Single Age
12WPY36_5	1106.00	6.55	0.88300	0.01600	0.09980	0.00170	0.68095	642.2	8.7	613.0	9.8	755	22	613.0	9.8	4.5	Rim
12WPY36_5	615.00	2.39	1.28000	0.02900	0.12700	0.00320	0.79558	837.0	13.0	771.0	18.0	1012	20	771.0	18.0	7.9	Rim
12WPY36_5	300.30	1.79	1.75300	0.03500	0.17240	0.00360	0.85030	1028.0	13.0	1025.0	20.0	1058	19	1025.0	20.0	0.3	Core
12WPY36_6	198.10	1.81	1.12000	0.01800	0.12440	0.00150	0.39472	762.9	8.5	756.0	8.7	764	28	756.0	8.7	0.9	Single Age
12WPY36_7	144.00	1.69	7.06000	0.18000	0.38850	0.00830	0.97112	2114.0	25.0	2114.0	39.0	2110	16	2110.0	16.0	0.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY36_8	219.70	1.70	7.02000	0.09000	0.37770	0.00460	0.84336	2116.0	11.0	2065.0	21.0	2172	7	2171.8	6.9	4.9	Single Age
12WPY36_9	355.00	1.18	1.57300	0.02200	0.15780	0.00220	0.72347	959.3	8.5	945.0	12.0	983	10	945.0	12.0	1.5	Single Age
12WPY36_10	160.80	1.18	23.37000	0.32000	0.63920	0.00810	0.87390	3241.0	13.0	3184.0	32.0	3271	5	3271.0	5.0	2.7	Single Age
12WPY36_11	195.00	0.88	4.82900	0.05900	0.31270	0.00510	0.81561	1790.0	10.0	1753.0	25.0	1895	12	1895.0	12.0	7.5	Single Age
12WPY36_12	540.00	34.40	0.83800	0.02400	0.10200	0.01100	0.94768	618.0	13.0	624.0	64.0	604	16	DISC	DISC	1.0	Rim
12WPY36_12	277.20	5.26	6.93200	0.09900	0.32420	0.00350	0.64642	2103.0	13.0	1816.0	19.0	2391	14	2391.0	14.0	24.0	Core
12WPY36_13	230.00	1.99	5.88100	0.05300	0.35350	0.00300	0.71843	1957.9	7.9	1951.0	14.0	1972	8	1971.6	8.1	1.0	Single Age
12WPY36_14	2120.00	38.30	0.64530	0.00550	0.07781	0.00076	0.77409	505.5	3.4	483.0	4.6	698	8	483.0	4.6	4.5	Single Age
12WPY36_16	217.00	0.58	0.78750	0.00770	0.09665	0.00099	0.52378	589.6	4.4	594.7	5.8	576	12	594.7	5.8	0.9	Single Age
12WPY36_17	442.10	0.55	1.55600	0.03600	0.15340	0.00270	0.55027	952.0	15.0	920.0	15.0	1054	32	920.0	15.0	3.4	Single Age
12WPY36_18	47.90	0.62	0.90000	0.01200	0.10730	0.00120	0.34953	651.2	6.4	656.9	7.0	623	17	656.9	7.0	0.9	Single Age
12WPY36_19	45.40	0.77	1.51300	0.02300	0.15470	0.00140	0.08068	934.9	9.2	927.0	8.0	947	19	927.0	8.0	0.8	Single Age
12WPY36_20	243.00	2.42	1.59100	0.02500	0.16340	0.00290	0.78576	966.6	9.9	976.0	16.0	953	14	976.0	16.0	1.0	Rim
12WPY36_20	96.10	0.88	2.87200	0.04300	0.23330	0.00400	0.72164	1374.0	11.0	1351.0	21.0	1402	15	1402.0	15.0	3.6	Core
12WPY36_21	25.07	0.19	0.92300	0.01700	0.10670	0.00160	0.43248	664.7	9.3	653.3	9.2	698	24	653.3	9.2	1.7	Single Age
12WPY36_22	193.00	0.66	0.89300	0.01500	0.10640	0.00160	0.57790	647.9	8.0	651.6	9.5	635	13	651.6	9.5	0.6	Single Age
12WPY36_23	271.00	0.76	0.71640	0.00770	0.08918	0.00085	0.72611	548.3	4.6	550.7	5.0	537	10	550.7	5.0	0.4	Single Age
12WPY36_24	303.00	2.11	9.17000	0.13000	0.41410	0.00680	0.75940	2355.0	13.0	2233.0	31.0	2466	13	2466.0	13.0	9.4	Single Age
12WPY36_25	555.00	2.20	1.00400	0.01500	0.11410	0.00220	0.87112	705.2	7.6	696.0	13.0	752	10	696.0	13.0	1.3	Single Age
12WPY36_26	218.00	1.32	0.89300	0.01200	0.10430	0.00140	0.56849	647.6	6.2	639.6	8.1	666	12	639.6	8.1	1.2	Single Age
12WPY36_27	97.00	0.91	0.77800	0.01100	0.09470	0.00140	0.41785	584.0	6.1	583.4	8.5	578	14	583.4	8.5	0.1	Single Age
12WPY36_28	300.00	3.89	0.96700	0.01200	0.11350	0.00130	0.68424	686.7	6.0	692.8	7.8	670	12	692.8	7.8	0.9	Single Age
12WPY36_29	1205.00	180.00	0.84450	0.00780	0.09830	0.00110	0.73044	621.5	4.3	604.1	6.3	686	12	604.1	6.3	2.8	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY36_29	358.00	1.60	1.59600	0.01800	0.15920	0.00260	0.55544	968.6	7.0	952.0	15.0	997	19	952.0	15.0	1.7	Core
12WPY36_30	356.80	20.70	4.69500	0.06000	0.30110	0.00310	0.61252	1766.0	11.0	1696.0	16.0	1842	18	1842.0	18.0	7.9	Single Age
12WPY36_31	63.00	0.85	1.82900	0.02700	0.17930	0.00190	0.49271	1055.1	9.5	1063.0	11.0	1039	20	1063.0	11.0	0.7	Single Age
12WPY36_32	555.00	1.96	2.66100	0.04000	0.21960	0.00320	0.70324	1317.0	11.0	1282.0	17.0	1389	16	1389.0	16.0	7.7	Rim
12WPY36_32	464.00	2.07	2.87300	0.03900	0.23510	0.00340	0.68540	1375.0	10.0	1361.0	18.0	1398	13	1398.0	13.0	2.6	Core
12WPY36_33	682.40	0.73	1.46100	0.01200	0.14580	0.00150	0.71992	914.2	5.0	877.1	8.4	1010	7	877.1	8.4	4.1	Rim
12WPY36_33	63.70	0.79	1.91900	0.04300	0.19310	0.00380	0.63484	1087.0	15.0	1138.0	20.0	990	22	1138.0	20.0	4.7	Core
12WPY36_34	84.80	1.43	1.63500	0.02700	0.16390	0.00300	0.65874	984.0	10.0	978.0	16.0	997	18	978.0	16.0	0.6	Single Age
12WPY36_35	715.00	8.63	0.84900	0.03500	0.09800	0.00390	0.67561	624.0	19.0	602.0	23.0	723	51	602.0	23.0	3.5	Rim
12WPY36_35	495.00	2.68	1.40700	0.02200	0.14520	0.00310	0.87718	891.8	9.3	874.0	18.0	933	16	874.0	18.0	2.0	Core
12WPY36_36	176.00	0.65	1.76400	0.05900	0.17470	0.00210	0.64550	1024.0	17.0	1038.0	12.0	1038	44	1038.0	12.0	1.4	Single Age
12WPY36_37	522.00	3.06	6.38000	0.10000	0.35500	0.00840	0.90378	2029.0	14.0	1958.0	40.0	2108	11	2108.0	11.0	7.1	Single Age
12WPY36_38	104.00	1.17	1.60600	0.02700	0.16500	0.00240	0.58405	973.0	10.0	985.0	13.0	949	17	985.0	13.0	1.2	Single Age
12WPY36_39	126.20	0.44	1.25900	0.01200	0.13650	0.00110	0.44651	827.0	5.5	825.0	6.2	837	13	825.0	6.2	0.2	Single Age
12WPY36_40	275.70	1.83	3.16400	0.05000	0.21030	0.00290	0.53151	1448.0	12.0	1230.0	15.0	1780	12	DISC	DISC	30.9	Single Age
12WPY36_41	369.00	24.60	0.94800	0.01100	0.10910	0.00120	0.66202	676.7	5.5	668.3	7.2	692	14	668.3	7.2	1.2	Single Age
12WPY36_42	242.90	0.71	12.96300	0.08300	0.51350	0.00350	0.67740	2676.7	6.0	2671.0	15.0	2685	6	2684.8	5.7	0.5	Single Age
12WPY36_43	329.00	8.48	0.68800	0.01900	0.08551	0.00088	0.02179	531.0	11.0	528.9	5.3	619	29	528.9	5.3	0.4	Rim
12WPY36_43	232.40	1.41	1.75100	0.02000	0.17670	0.00180	0.43203	1027.4	7.4	1049.0	10.0	958	19	1049.0	10.0	2.1	Core
12WPY36_44	359.00	5.81	1.54800	0.01800	0.15170	0.00200	0.77736	949.5	7.1	910.0	11.0	1027	11	910.0	11.0	4.2	Single Age
12WPY36_45	247.00	0.94	1.68000	0.01900	0.16660	0.00200	0.71871	1001.4	6.8	993.0	11.0	1017	12	993.0	11.0	0.8	Single Age
12WPY36_46	149.00	0.94	0.69600	0.01000	0.08700	0.00110	0.62712	537.3	6.1	537.5	6.5	534	17	537.5	6.5	0.0	Single Age
12WPY36_47	243.50	0.98	1.59900	0.01500	0.16160	0.00150	0.63157	969.5	6.0	965.4	8.2	974	12	965.4	8.2	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY36_48	469.00	1.76	0.86300	0.01400	0.10230	0.00190	0.90767	631.3	7.7	628.0	11.0	639	9	628.0	11.0	0.5	Single Age
12WPY36_49	1074.00	0.76	0.68940	0.00900	0.08290	0.00100	0.59450	532.3	5.4	513.6	6.2	621	12	513.6	6.2	3.5	Rim
12WPY36_49	411.00	0.69	0.78900	0.01300	0.09490	0.00160	0.76047	592.6	7.8	584.6	9.4	613	19	584.6	9.4	1.3	Core
12WPY36_50	111.20	2.74	0.98200	0.01700	0.11510	0.00160	0.70847	695.4	8.7	702.3	9.1	673	14	702.3	9.1	1.0	Single Age
12WPY36_51	105.00	2.35	9.70000	0.19000	0.40110	0.00590	0.11982	2406.0	18.0	2174.0	27.0	2600	33	2600.0	33.0	16.4	Single Age
12WPY36_52	85.20	0.82	5.25300	0.04300	0.33340	0.00290	0.67866	1860.8	6.9	1854.0	14.0	1873	9	1873.4	8.8	1.0	Single Age
12WPY36_53	94.00	0.57	5.09900	0.07200	0.32810	0.00530	0.67940	1836.0	12.0	1829.0	26.0	1854	13	1854.0	13.0	1.3	Rim
12WPY36_53	115.20	1.09	15.08000	0.57000	0.53810	0.00730	0.60517	2817.0	36.0	2775.0	31.0	2843	50	2843.0	50.0	2.4	Core
12WPY36_54	782.00	11.60	0.88600	0.03800	0.10340	0.00420	0.80667	644.0	20.0	634.0	25.0	684	66	634.0	25.0	1.6	Rim
12WPY36_54	314.00	0.84	1.36400	0.01800	0.14420	0.00200	0.65141	873.2	7.8	868.0	12.0	874	17	868.0	12.0	0.6	Core
12WPY36_55	264.00	3.19	0.77570	0.00820	0.09393	0.00097	0.75275	582.9	4.7	578.7	5.7	640	10	578.7	5.7	0.7	Single Age
12WPY36_56	244.40	1.45	1.70600	0.01300	0.17060	0.00190	0.37283	1010.4	4.8	1015.0	10.0	996	16	1015.0	10.0	0.5	Single Age
12WPY36_57	279.00	0.76	0.91000	0.01100	0.10850	0.00120	0.78346	657.5	6.0	663.7	6.9	636	12	663.7	6.9	0.9	Single Age
12WPY36_58	165.00	0.72	6.73900	0.08900	0.38220	0.00500	0.73176	2076.0	12.0	2086.0	23.0	2083	7	2083.2	6.9	0.1	Single Age
12WPY36_59	816.00	6.49	1.18600	0.02700	0.12300	0.00250	0.53865	796.0	12.0	747.0	14.0	932	28	747.0	14.0	6.2	Rim
12WPY36_59	704.00	6.27	1.32300	0.02500	0.13860	0.00300	0.77536	856.0	11.0	836.0	17.0	896	21	836.0	17.0	2.3	Core
12WPY36_60	238.90	2.46	0.92460	0.00780	0.10774	0.00089	0.55246	665.2	4.2	659.6	5.2	687	10	659.6	5.2	0.8	Single Age
12WPY36_61	428.00	2.98	1.14500	0.03100	0.12670	0.00390	0.76738	774.0	14.0	769.0	22.0	768	19	769.0	22.0	0.6	Rim
12WPY36_61	169.50	0.87	1.43000	0.03600	0.14270	0.00270	0.49063	901.0	15.0	860.0	16.0	979	21	860.0	16.0	4.6	Core
12WPY36_62	114.30	1.33	1.60300	0.01700	0.16170	0.00180	0.65945	971.1	6.8	966.0	10.0	989	10	966.0	10.0	0.5	Single Age
12WPY36_63	811.00	3.70	0.77500	0.01000	0.08940	0.00110	0.79425	582.3	6.0	552.0	6.5	717	12	552.0	6.5	5.2	Single Age
12WPY36_64	169.00	0.98	1.89600	0.02500	0.18600	0.00260	0.64803	1079.3	8.7	1101.0	14.0	1048	15	1101.0	14.0	2.0	Single Age
12WPY36_65	254.00	0.66	0.92300	0.01000	0.10970	0.00100	0.86450	663.6	5.4	670.9	5.9	645	10	670.9	5.9	1.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY36_66	365.00	17.10	1.04000	0.02000	0.12200	0.00180	0.78935	723.6	9.7	742.0	10.0	697	13	742.0	10.0	2.5	Rim
12WPY36_66	299.00	0.88	1.31200	0.02300	0.14440	0.00270	0.84596	850.8	9.9	870.0	15.0	802	12	870.0	15.0	2.3	Core
12WPY36_67	123.40	0.60	5.39300	0.03400	0.34010	0.00220	0.76717	1883.4	5.4	1887.0	11.0	1881	6	1880.7	6.1	0.3	Single Age
12WPY36_68	352.00	0.39	0.84800	0.01200	0.10130	0.00150	0.86711	623.0	6.8	621.9	8.8	628	10	621.9	8.8	0.2	Single Age
12WPY36_69	313.00	1.23	1.75500	0.03000	0.17330	0.00390	0.18139	1029.0	11.0	1030.0	21.0	1041	24	1030.0	21.0	0.1	Single Age
12WPY36_70	146.80	1.86	14.41000	0.14000	0.53220	0.00590	0.74334	2776.4	8.9	2754.0	24.0	2801	7	2800.7	7.2	1.7	Single Age
12WPY36_71	1484.00	39.10	0.62970	0.00470	0.07730	0.00074	0.70491	495.9	2.9	480.0	4.5	580	8	480.0	4.5	3.2	Single Age
12WPY36_72	154.80	0.58	1.62400	0.01800	0.16320	0.00150	0.60519	979.0	6.8	974.5	8.3	976	15	974.5	8.3	0.5	Single Age
12WPY36_73	209.60	1.08	4.38900	0.09900	0.27770	0.00570	0.89408	1712.0	18.0	1579.0	29.0	1877	11	1877.0	11.0	15.9	Single Age
12WPY36_74	145.00	0.36	12.63300	0.08600	0.50310	0.00390	0.67080	2652.3	6.4	2627.0	17.0	2666	8	2665.8	8.4	1.5	Single Age
12WPY36_75	590.00	67.80	1.48600	0.03700	0.15150	0.00420	0.91429	924.0	15.0	909.0	24.0	968	14	909.0	24.0	1.6	Rim
12WPY36_75	143.10	1.56	4.49000	0.11000	0.26150	0.00550	0.77083	1729.0	20.0	1497.0	28.0	2063	29	2063.0	29.0	27.4	Core
12WPY36_76	259.00	2.60	1.67100	0.02100	0.16320	0.00190	0.46354	998.8	7.7	974.0	11.0	1042	12	974.0	11.0	2.5	Single Age
12WPY36_77	159.50	0.81	1.87500	0.01600	0.18200	0.00150	0.61751	1072.0	5.5	1077.6	8.4	1071	9	1077.6	8.4	0.5	Single Age
12WPY36_78	35.73	2.50	6.55000	0.17000	0.30470	0.00480	0.74538	2051.0	23.0	1714.0	24.0	2430	21	2430.0	21.0	29.5	Single Age
12WPY36_79	127.00	0.60	1.91400	0.01600	0.18290	0.00180	0.61239	1085.8	5.7	1083.0	10.0	1077	11	1083.0	10.0	0.3	Single Age
12WPY36_80	1127.00	0.85	1.09400	0.01200	0.11980	0.00150	0.63241	751.2	5.4	729.3	8.4	827	14	729.3	8.4	2.9	Rim
12WPY36_80	426.00	0.61	1.22300	0.02300	0.13470	0.00210	0.88550	811.0	11.0	815.0	12.0	796	15	815.0	12.0	0.5	Core
12WPY36_81	1090.00	69.00	5.33000	0.25000	0.33230	0.00570	0.03920	1869.0	40.0	1849.0	28.0	1887	86	1887.0	86.0	2.0	Rim
12WPY36_81	240.00	1.32	13.13000	0.20000	0.52200	0.00810	0.88209	2688.0	14.0	2707.0	34.0	2672	7	2671.5	7.3	1.3	Core
12WPY36_82	267.00	0.82	1.46700	0.01600	0.14890	0.00170	0.68751	916.5	6.4	894.6	9.5	969	13	894.6	9.5	2.4	Single Age
12WPY36_83	43.50	19.40	0.90300	0.02700	0.10750	0.00240	0.65239	652.0	14.0	658.0	14.0	654	27	658.0	14.0	0.9	Rim
12WPY36_83	54.20	1.38	9.25000	0.26000	0.40500	0.01100	0.84602	2362.0	25.0	2190.0	51.0	2505	13	2505.0	13.0	12.6	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY36_84	212.00	1.17	1.26600	0.01400	0.13610	0.00130	0.68682	830.2	6.3	823.6	6.9	847	9	823.6	6.9	0.8	Single Age
12WPY36_86	72.70	1.29	4.90500	0.05400	0.30490	0.00330	0.71792	1802.3	9.3	1715.0	16.0	1912	10	1912.1	9.7	10.3	Single Age
12WPY36_87	279.00	1.18	11.42000	0.11000	0.48270	0.00510	0.73156	2557.8	9.4	2539.0	22.0	2584	9	2583.6	8.5	1.7	Single Age
12WPY36_88	382.00	1.72	1.59700	0.02600	0.16380	0.00290	0.89514	968.0	10.0	978.0	16.0	943	9	978.0	16.0	1.0	Single Age
12WPY36_89	1605.00	1.35	0.61580	0.00980	0.07540	0.00120	0.72924	487.1	6.2	468.5	7.1	572	14	468.5	7.1	3.8	Single Age
12WPY36_90	148.70	0.84	0.97200	0.01000	0.11320	0.00120	0.46918	689.0	5.4	691.3	6.9	691	15	691.3	6.9	0.3	Single Age
12WPY36_91	129.00	1.45	1.71600	0.07300	0.16250	0.00320	0.61296	1008.0	26.0	970.0	18.0	1102	49	970.0	18.0	3.8	Single Age
12WPY36_92	484.00	6.45	0.95300	0.01200	0.11000	0.00160	0.85680	679.5	6.3	672.7	9.2	709	8	672.7	9.2	1.0	Single Age
12WPY36_93	362.00	4.90	1.16000	0.04800	0.12840	0.00570	0.94372	781.0	23.0	778.0	33.0	781	18	778.0	33.0	0.4	Rim
12WPY36_93	128.50	0.63	1.42800	0.01600	0.15060	0.00150	0.28812	901.5	7.0	904.4	8.6	900	20	904.4	8.6	0.3	Core
12WPY36_94	294.00	1.84	1.06500	0.01100	0.11950	0.00110	0.54074	736.0	5.5	727.6	6.6	740	14	727.6	6.6	1.1	Single Age
12WPY36_95	137.60	3.25	0.80400	0.04900	0.09750	0.00470	0.93131	597.0	28.0	599.0	28.0	670	30	599.0	28.0	0.3	Single Age
12WPY36_96	1701.00	9.42	1.86200	0.03800	0.14360	0.00310	0.90519	1066.0	13.0	865.0	17.0	1618	10	DISC	DISC	18.9	Single Age
12WPY36_98	143.00	1.80	1.27400	0.01800	0.14120	0.00230	0.64618	833.7	8.1	851.0	13.0	796	13	851.0	13.0	2.1	Single Age
12WPY36_99	236.00	2.14	0.97500	0.01700	0.11250	0.00180	0.81656	690.5	8.8	689.0	11.0	703	13	689.0	11.0	0.2	Single Age
12WPY36_100	1520.00	32.60	0.62100	0.01200	0.07450	0.00150	0.78052	490.5	7.4	463.4	8.8	638	17	463.4	8.8	5.5	Rim
12WPY36_100	162.80	3.24	1.39600	0.08600	0.14330	0.00390	0.39000	883.0	35.0	863.0	22.0	1020	130	863.0	22.0	2.3	Core
12WPY36_101	146.00	1.17	4.71000	0.05300	0.31340	0.00360	0.79901	1768.4	9.4	1757.0	17.0	1787	7	1786.7	6.9	1.7	Single Age
12WPY36_102	118.50	1.00	1.55300	0.01600	0.15720	0.00160	0.62001	952.3	6.6	941.3	8.7	991	10	941.3	8.7	1.2	Single Age
12WPY36_103	368.00	1.10	0.88530	0.00880	0.10460	0.00110	0.72732	643.6	4.8	641.3	6.2	651	10	641.3	6.2	0.4	Single Age
12WPY36_104	298.10	2.65	0.92600	0.01200	0.10880	0.00200	0.42192	665.5	6.5	666.0	12.0	677	17	666.0	12.0	0.1	Rim
12WPY36_104	200.60	0.62	1.64700	0.03100	0.16490	0.00320	0.66354	988.0	12.0	984.0	18.0	995	25	984.0	18.0	0.4	Core
12WPY36_105	244.00	0.60	12.56000	0.14000	0.50260	0.00560	0.84778	2646.0	11.0	2630.0	24.0	2657	5	2656.8	5.0	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY36_106	375.00	1.55	1.09650	0.00760	0.12380	0.00110	0.58508	751.5	3.7	752.1	6.5	756	9	752.1	6.5	0.1	Single Age
12WPY36_107	81.00	1.00	1.82000	0.01800	0.17700	0.00160	0.47952	1052.4	6.5	1050.3	8.9	1050	11	1050.3	8.9	0.2	Single Age
12WPY36_108	288.00	2.12	0.95700	0.01300	0.11100	0.00130	0.75468	681.3	6.6	678.6	7.5	691	10	678.6	7.5	0.4	Single Age
12WPY36_109	373.00	1.21	6.19500	0.05200	0.36420	0.00320	0.82455	2003.3	7.3	2004.0	16.0	2002	6	2001.7	6.1	0.1	Single Age
12WPY36_110	303.00	14.90	1.63300	0.06000	0.16360	0.00570	0.93960	982.0	23.0	976.0	32.0	1014	11	976.0	32.0	0.6	Rim
12WPY36_110	166.40	0.35	3.16600	0.05300	0.25220	0.00460	0.60743	1449.0	13.0	1450.0	24.0	1446	17	1446.0	17.0	0.3	Core
12WPY36_112	210.10	0.73	0.84000	0.01000	0.10170	0.00160	0.42433	619.0	5.6	624.6	9.5	613	21	624.6	9.5	0.9	Single Age
12WPY36_113	241.70	0.66	0.86190	0.00970	0.10300	0.00130	0.41576	631.0	5.3	632.0	7.4	621	18	632.0	7.4	0.2	Single Age
12WPY36_114	827.00	14.50	2.36900	0.06800	0.19140	0.00560	0.95921	1231.0	20.0	1137.0	32.0	1424	13	1137.0	32.0	7.6	Single Age
12WPY36_115	78.30	1.05	1.82700	0.02900	0.17730	0.00210	0.55355	1056.3	9.8	1052.0	11.0	1083	19	1052.0	11.0	0.4	Single Age
12WPY36_116	610.00	0.75	0.83400	0.01300	0.09890	0.00160	0.88145	616.3	7.2	608.0	9.4	643	8	608.0	9.4	1.3	Single Age
12WPY36_117	196.10	0.46	0.82650	0.00830	0.10000	0.00100	0.86426	611.5	4.6	614.5	5.8	610	12	614.5	5.8	0.5	Single Age
12WPY36_118	828.00	4.92	0.78700	0.02200	0.09130	0.00220	0.83922	589.0	12.0	563.0	13.0	671	25	563.0	13.0	4.4	Rim
12WPY36_118	471.00	0.89	1.36800	0.01700	0.14140	0.00180	0.62797	875.1	7.3	853.0	10.0	939	13	853.0	10.0	2.5	Core
12WPY36_119	340.00	1.19	0.94600	0.01100	0.11180	0.00140	0.75980	675.9	5.9	683.3	8.1	664	9	683.3	8.1	1.1	Single Age
12WPY36_120	225.50	0.49	9.03000	0.22000	0.41580	0.00730	0.88096	2339.0	22.0	2241.0	33.0	2418	14	2418.0	14.0	7.3	Single Age
12WPY36_121	202.60	0.57	6.74600	0.08800	0.37950	0.00450	0.95744	2077.0	12.0	2073.0	21.0	2082	8	2082.2	7.9	0.4	Single Age
12WPY36_122	263.00	1.93	1.47800	0.03200	0.15540	0.00330	0.91885	922.0	13.0	931.0	18.0	909	9	931.0	18.0	1.0	Single Age
12WPY36_123	1122.00	13.69	0.64700	0.01100	0.07740	0.00170	0.85617	506.4	7.1	481.0	10.0	621	12	481.0	10.0	5.0	Rim
12WPY36_123	340.00	4.94	1.55800	0.01600	0.15750	0.00210	0.36821	953.6	6.4	943.0	12.0	990	15	943.0	12.0	1.1	Core
12WPY36_124	57.00	0.65	1.90000	0.02600	0.18780	0.00240	0.61101	1080.3	9.2	1109.0	13.0	1024	16	1109.0	13.0	2.7	Single Age
12WPY36_125	41.09	0.57	1.64300	0.03600	0.16420	0.00230	0.23146	986.0	14.0	980.0	13.0	1016	22	980.0	13.0	0.6	Single Age
12WPY41_1	90.00	1.23	0.91700	0.01900	0.10560	0.00160	0.47064	659.9	9.9	647.0	9.3	695	21	647.0	9.3	2.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY41_2	417.00	0.54	4.08700	0.07600	0.28280	0.00410	0.64167	1650.0	15.0	1605.0	21.0	1711	19	1711.0	19.0	6.2	Single Age
12WPY41_3	246.00	1.05	0.84400	0.01000	0.09960	0.00140	0.54416	621.0	5.6	611.8	8.3	659	14	611.8	8.3	1.5	Single Age
12WPY41_4	339.00	1.45	0.98100	0.01100	0.10680	0.00100	0.71758	693.8	5.7	654.1	5.9	837	10	654.1	5.9	5.7	Single Age
12WPY41_5	238.00	4.66	2.33800	0.02200	0.20970	0.00210	0.39912	1224.6	6.8	1227.0	11.0	1227	15	1227.0	15.0	0.0	Single Age
12WPY41_6	162.00	0.96	1.27500	0.01300	0.14040	0.00150	0.49466	834.5	6.0	846.9	8.5	791	12	846.9	8.5	1.5	Single Age
12WPY41_7	284.50	2.47	2.25700	0.09600	0.17650	0.00490	0.95035	1200.0	31.0	1047.0	27.0	1494	35	DISC	DISC	12.8	Single Age
12WPY41_8	267.00	5.74	4.61000	0.13000	0.28560	0.00670	0.94929	1747.0	24.0	1622.0	34.0	1895	10	1895.0	10.0	14.4	Single Age
12WPY41_9	317.00	1.51	5.38000	0.04600	0.32670	0.00350	0.70599	1881.2	7.4	1822.0	17.0	1951	9	1951.0	9.1	6.6	Single Age
12WPY41_10	317.90	24.70	0.99700	0.03500	0.10470	0.00140	0.13974	702.0	18.0	641.7	8.1	947	75	641.7	8.1	8.6	Rim
12WPY41_10	349.00	5.02	3.32900	0.07200	0.22200	0.00360	0.67908	1487.0	17.0	1292.0	19.0	1787	21	1787.0	21.0	27.7	Core
12WPY41_11	231.00	1.62	2.85700	0.06500	0.21180	0.00390	0.86993	1374.0	17.0	1238.0	21.0	1594	18	1594.0	18.0	22.3	Single Age
12WPY41_12	160.70	0.67	1.50200	0.02200	0.15140	0.00200	0.66064	930.6	9.1	909.0	11.0	988	15	909.0	11.0	2.3	Single Age
12WPY41_13	399.30	2.66	0.65370	0.00580	0.08170	0.00077	0.62417	511.1	3.6	506.3	4.6	525	11	506.3	4.6	0.9	Single Age
12WPY41_14	189.00	0.58	8.57000	0.16000	0.36390	0.00540	0.83369	2293.0	17.0	2000.0	25.0	2562	11	2562.0	11.0	21.9	Single Age
12WPY41_15	243.00	1.28	1.24300	0.02500	0.12700	0.00240	0.82667	821.0	12.0	771.0	14.0	967	16	771.0	14.0	6.1	Single Age
12WPY41_16	79.70	0.78	2.29500	0.04100	0.18810	0.00300	0.68644	1210.0	13.0	1114.0	16.0	1377	15	1114.0	16.0	7.9	Single Age
12WPY41_17	393.00	2.24	0.90660	0.00920	0.10350	0.00110	0.42555	655.0	4.9	634.7	6.5	730	18	634.7	6.5	3.1	Single Age
12WPY41_18	138.00	0.86	1.42700	0.05200	0.14860	0.00360	0.90750	901.0	22.0	893.0	20.0	938	24	893.0	20.0	0.9	Single Age
12WPY41_19	132.10	1.16	5.68200	0.09100	0.34800	0.00480	0.93513	1927.0	14.0	1924.0	23.0	1935	12	1935.0	12.0	0.6	Single Age
12WPY41_20	78.60	0.43	12.20800	0.08700	0.51280	0.00370	0.53377	2620.1	6.7	2668.0	16.0	2588	7	2587.6	7.0	3.1	Single Age
12WPY41_22	895.00	10.00	0.93400	0.01400	0.10890	0.00130	0.75254	669.0	7.1	666.5	7.4	685	12	666.5	7.4	0.4	Single Age
12WPY41_23	518.00	3.47	1.13500	0.01800	0.12030	0.00190	0.84107	770.1	8.6	732.0	11.0	873	13	732.0	11.0	4.9	Single Age
12WPY41_24	71.00	0.67	0.91700	0.01100	0.10741	0.00094	0.30980	660.8	5.6	657.6	5.5	654	14	657.6	5.5	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY41_25	457.00	1.58	9.43000	0.17000	0.42590	0.00520	0.79650	2380.0	17.0	2286.0	24.0	2455	15	2455.0	15.0	6.9	Single Age
12WPY41_27	924.00	14.43	4.53900	0.07300	0.28360	0.00280	0.75761	1737.0	14.0	1609.0	14.0	1892	16	1892.0	16.0	15.0	Single Age
12WPY41_28	514.00	1.02	1.64900	0.01200	0.16320	0.00120	0.52015	989.0	4.7	974.2	6.7	1016	11	974.2	6.7	1.5	Single Age
12WPY41_29	93.30	1.04	1.04200	0.01300	0.11820	0.00110	0.31162	724.7	6.6	720.2	6.4	744	15	720.2	6.4	0.6	Single Age
12WPY41_30	96.50	0.45	0.84300	0.01300	0.09910	0.00130	0.41217	620.1	7.2	609.3	7.5	669	23	609.3	7.5	1.7	Single Age
12WPY41_31	494.00	1.20	9.21000	0.10000	0.41290	0.00410	0.82814	2359.6	9.9	2228.0	19.0	2465	6	2464.6	6.0	9.6	Single Age
12WPY41_32	531.00	0.75	0.85240	0.00670	0.10255	0.00086	0.48286	625.8	3.7	629.3	5.1	610	11	629.3	5.1	0.6	Single Age
12WPY41_33	176.70	0.81	1.71800	0.01800	0.16930	0.00160	0.50259	1015.0	6.5	1008.2	8.7	1026	10	1008.2	8.7	0.7	Single Age
12WPY41_34	333.00	0.57	0.87370	0.00850	0.10460	0.00100	0.37463	637.4	4.6	641.2	5.8	625	13	641.2	5.8	0.6	Single Age
12WPY41_35	53.90	0.91	0.90100	0.01800	0.10180	0.00150	0.49759	651.7	9.4	624.8	8.8	745	31	624.8	8.8	4.1	Single Age
12WPY41_36	98.10	1.37	1.00900	0.02300	0.11250	0.00190	0.61205	707.0	12.0	687.0	11.0	784	25	687.0	11.0	2.8	Single Age
12WPY41_37	32.70	0.40	6.10000	0.21000	0.34300	0.01300	0.92850	1982.0	30.0	1894.0	64.0	2101	14	2101.0	14.0	9.9	Single Age
12WPY41_38	62.90	0.99	1.62500	0.02600	0.16110	0.00180	0.43034	979.0	10.0	962.6	9.9	1012	17	962.6	9.9	1.7	Single Age
12WPY41_39	439.00	2.37	0.79700	0.01700	0.09610	0.00190	0.83421	594.1	9.5	591.0	11.0	630	12	591.0	11.0	0.5	Single Age
12WPY41_40	152.30	0.72	0.88800	0.02000	0.10380	0.00150	0.81075	644.0	11.0	636.4	9.0	670	22	636.4	9.0	1.2	Single Age
12WPY41_41	88.40	0.44	1.15900	0.02700	0.12160	0.00180	0.23527	781.0	13.0	740.0	10.0	896	38	740.0	10.0	5.2	Single Age
12WPY41_42	627.00	7.01	1.41900	0.02100	0.14530	0.00190	0.83236	896.4	8.8	875.0	11.0	953	10	875.0	11.0	2.4	Single Age
12WPY41_43	503.20	3.84	1.13200	0.02500	0.11780	0.00170	0.90703	767.0	12.0	719.0	9.7	906	20	719.0	9.7	6.3	Single Age
12WPY41_44	452.00	15.70	1.08400	0.02000	0.12380	0.00190	0.86855	745.0	10.0	752.0	11.0	726	14	752.0	11.0	0.9	Single Age
12WPY41_45	87.70	0.96	1.55400	0.02000	0.15390	0.00210	0.52397	951.7	7.8	922.0	11.0	1028	14	922.0	11.0	3.1	Single Age
12WPY41_46	1256.00	3.01	3.04800	0.04700	0.18780	0.00250	0.85346	1419.0	12.0	1109.0	13.0	1931	11	DISC	DISC	21.8	Single Age
12WPY41_47	79.20	0.40	1.49900	0.02500	0.15760	0.00230	0.54615	930.6	9.8	943.0	13.0	908	14	943.0	13.0	1.3	Single Age
12WPY41_48	236.00	0.59	0.83800	0.01400	0.09910	0.00150	0.50319	617.4	7.8	609.3	9.0	658	23	609.3	9.0	1.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY41_49	211.50	1.17	5.42000	0.05400	0.32610	0.00520	0.55124	1887.5	8.5	1819.0	25.0	1951	14	1951.0	14.0	6.8	Single Age
12WPY41_50	682.90	0.59	1.30900	0.01200	0.14010	0.00160	0.73600	849.3	5.4	844.9	8.8	869	10	844.9	8.8	0.5	Single Age
12WPY41_51	438.00	3.32	1.55000	0.04100	0.16050	0.00350	0.96475	948.0	17.0	959.0	19.0	921	16	959.0	19.0	1.2	Single Age
12WPY41_52	193.00	0.93	1.40100	0.06200	0.14560	0.00470	0.94908	883.0	27.0	875.0	27.0	909	28	875.0	27.0	0.9	Single Age
12WPY41_53	346.00	3.57	1.85900	0.02800	0.17460	0.00250	0.69582	1067.1	9.7	1037.0	14.0	1128	20	1037.0	14.0	2.8	Single Age
12WPY41_54	947.00	1.48	0.87800	0.00780	0.10160	0.00100	0.59950	639.7	4.2	623.9	6.0	702	11	623.9	6.0	2.5	Single Age
12WPY41_55	397.00	6.02	0.88850	0.00970	0.10610	0.00110	0.58529	645.3	5.2	650.3	6.6	647	12	650.3	6.6	0.8	Single Age
12WPY41_56	281.00	0.77	1.74800	0.01300	0.17400	0.00120	0.45040	1026.2	4.7	1034.1	6.9	1009	11	1034.1	6.9	0.8	Single Age
12WPY41_57	106.20	1.91	0.93300	0.01100	0.11160	0.00110	0.36822	668.9	5.8	681.8	6.6	642	15	681.8	6.6	1.9	Single Age
12WPY41_58	128.00	0.57	11.45000	0.13000	0.47930	0.00500	0.75150	2561.0	10.0	2524.0	22.0	2588	6	2588.1	6.1	2.5	Single Age
12WPY41_59	790.00	2.67	3.49500	0.05800	0.19440	0.00260	0.85128	1527.0	13.0	1145.0	14.0	2106	10	DISC	DISC	25.0	Single Age
12WPY41_60	880.00	8.20	1.65600	0.06600	0.12100	0.00280	0.97137	990.0	25.0	736.0	16.0	1615	34	DISC	DISC	25.7	Single Age
12WPY41_61	124.20	0.38	1.74900	0.01800	0.17070	0.00160	0.48005	1026.5	6.8	1016.1	8.6	1049	14	1016.1	8.6	1.0	Single Age
12WPY41_62	106.40	2.54	0.93400	0.01900	0.10910	0.00140	0.49237	668.9	9.7	667.7	8.2	691	25	667.7	8.2	0.2	Single Age
12WPY41_63	337.00	4.40	1.45300	0.02200	0.15280	0.00190	0.92184	911.9	8.6	916.0	11.0	908	9	916.0	11.0	0.4	Single Age
12WPY41_64	573.00	2.90	1.08300	0.02000	0.11820	0.00200	0.88412	744.2	9.6	720.0	11.0	820	10	720.0	11.0	3.3	Single Age
12WPY41_65	430.00	9.90	0.77600	0.01700	0.08820	0.00140	0.90543	582.1	9.8	544.7	8.5	733	15	544.7	8.5	6.4	Single Age
12WPY41_66	428.00	0.50	7.29300	0.09300	0.32690	0.00410	0.74360	2147.0	11.0	1823.0	20.0	2472	10	2472.0	9.8	26.3	Single Age
12WPY41_67	123.10	1.27	4.63000	0.14000	0.30300	0.00750	0.95539	1754.0	24.0	1705.0	37.0	1818	10	1818.0	10.0	6.2	Single Age
12WPY41_68	132.10	0.39	1.79300	0.02700	0.17240	0.00190	0.27450	1043.7	9.4	1025.0	10.0	1071	21	1025.0	10.0	1.8	Single Age
12WPY41_69	725.00	1.89	1.06480	0.00920	0.11970	0.00130	0.68451	736.0	4.5	728.9	7.4	769	10	728.9	7.4	1.0	Single Age
12WPY41_70	112.00	1.73	8.42300	0.06300	0.39610	0.00440	0.52735	2277.4	6.8	2150.0	20.0	2403	9	2402.8	8.7	10.5	Single Age
12WPY41_71	112.00	1.83	0.89600	0.01300	0.10620	0.00170	0.29282	651.0	7.1	650.6	9.8	649	24	650.6	9.8	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY41_72	929.00	5.53	0.89640	0.00970	0.10140	0.00140	0.04308	649.7	5.2	622.6	7.9	747	24	622.6	7.9	4.2	Single Age
12WPY41_73	341.60	4.92	12.62800	0.08500	0.49360	0.00440	0.70561	2653.8	6.4	2586.0	19.0	2713	4	2713.0	4.0	4.7	Single Age
12WPY41_74	90.90	0.53	5.63500	0.05200	0.35810	0.00360	0.49141	1921.0	8.0	1973.0	17.0	1863	12	1863.0	12.0	5.9	Single Age
12WPY41_75	133.00	1.43	1.10400	0.01800	0.12860	0.00160	0.62256	756.1	8.7	779.5	9.1	709	17	779.5	9.1	3.1	Single Age
12WPY41_76	74.00	0.51	0.80400	0.01400	0.09830	0.00160	0.46873	598.4	8.0	604.3	9.2	574	21	604.3	9.2	1.0	Single Age
12WPY41_77	195.90	0.90	11.84000	0.16000	0.48210	0.00760	0.71516	2590.0	13.0	2535.0	33.0	2641	10	2641.0	10.0	4.0	Single Age
12WPY41_78	281.00	1.49	0.78430	0.00810	0.09445	0.00082	0.59591	587.7	4.6	581.8	4.9	609	11	581.8	4.9	1.0	Single Age
12WPY41_79	158.00	1.28	0.90600	0.01500	0.10910	0.00170	0.52084	654.3	8.2	667.2	9.8	647	21	667.2	9.8	2.0	Single Age
12WPY41_80	212.00	0.64	1.84200	0.01200	0.18130	0.00140	0.52955	1061.1	4.2	1075.0	7.3	1038	10	1075.0	7.3	1.3	Single Age
12WPY41_81	904.00	0.42	0.89400	0.01100	0.10390	0.00160	0.79681	648.8	6.3	637.3	9.1	690	13	637.3	9.1	1.8	Single Age
12WPY41_82	45.10	1.37	1.14700	0.02400	0.12800	0.00180	0.55607	775.0	11.0	776.0	10.0	772	21	776.0	10.0	0.1	Single Age
12WPY41_83	303.00	1.55	1.07400	0.01700	0.12410	0.00190	0.84009	741.3	8.5	754.0	11.0	706	14	754.0	11.0	1.7	Single Age
12WPY41_84	589.00	0.49	3.62100	0.08300	0.24930	0.00480	0.91284	1552.0	18.0	1434.0	25.0	1726	11	1726.0	11.0	16.9	Single Age
12WPY41_85	14.00	0.64	1.48400	0.06300	0.15490	0.00460	0.51325	920.0	25.0	928.0	26.0	898	48	928.0	26.0	0.9	Single Age
12WPY41_86	245.70	0.91	7.26000	0.21000	0.37720	0.00720	0.94166	2148.0	27.0	2062.0	34.0	2246	20	2246.0	20.0	8.2	Single Age
12WPY41_87	383.90	7.70	0.93020	0.00970	0.10979	0.00098	0.35682	667.5	5.1	671.5	5.7	659	12	671.5	5.7	0.6	Single Age
12WPY41_88	291.00	227.00	0.89300	0.01900	0.10790	0.00180	0.22884	648.0	10.0	661.0	10.0	615	25	661.0	10.0	2.0	Rim
12WPY41_88	253.50	1.17	10.40000	0.16000	0.45710	0.00700	0.87748	2470.0	15.0	2426.0	31.0	2516	9	2515.5	9.4	3.6	Core
12WPY41_89	244.00	1.03	11.21000	0.36000	0.47100	0.01200	0.93843	2539.0	29.0	2484.0	53.0	2581	12	2581.0	12.0	3.8	Single Age
12WPY41_90	462.00	1.85	3.53600	0.06000	0.20220	0.00310	0.74507	1534.0	13.0	1187.0	17.0	2067	13	DISC	DISC	22.6	Single Age
12WPY41_91	74.20	0.99	3.80000	0.16000	0.26540	0.00910	0.91632	1590.0	33.0	1516.0	46.0	1671	20	1671.0	20.0	9.3	Single Age
12WPY41_92	65.10	0.34	1.80000	0.22000	0.10400	0.00200	0.78832	1013.0	74.0	637.0	12.0	1840	170	DISC	DISC	37.1	Single Age
12WPY41_93	358.80	1.64	0.92810	0.00990	0.10840	0.00100	0.57931	667.1	5.0	663.6	5.9	678	14	663.6	5.9	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY41_94	560.00	0.98	1.92400	0.03000	0.15580	0.00130	0.32921	1089.0	10.0	933.2	7.4	1422	29	DISC	DISC	14.3	Single Age
12WPY41_95	491.50	4.56	0.95790	0.00890	0.11380	0.00110	0.45722	682.6	4.5	694.8	6.6	655	13	694.8	6.6	1.8	Single Age
12WPY41_96	193.50	1.78	1.02000	0.01200	0.11970	0.00130	0.57608	713.4	5.8	728.6	7.4	673	13	728.6	7.4	2.1	Single Age
12WPY41_97	157.50	0.44	0.83570	0.00980	0.10010	0.00095	0.57154	617.2	5.5	615.0	5.6	622	14	615.0	5.6	0.4	Single Age
12WPY41_98	219.30	1.03	1.23500	0.01400	0.13490	0.00150	0.53362	816.4	6.2	815.5	8.7	822	14	815.5	8.7	0.1	Single Age
12WPY41_100	190.70	0.66	10.58000	0.09900	0.42460	0.00420	0.79822	2486.3	8.7	2281.0	19.0	2662	7	2661.6	6.6	14.3	Single Age
12WPY41_101	469.00	0.98	0.68430	0.00950	0.08650	0.00110	0.56001	529.1	5.7	534.6	6.8	521	14	534.6	6.8	1.0	Single Age
12WPY41_102	755.00	3.75	4.60200	0.04000	0.28500	0.00370	0.68314	1750.6	7.6	1616.0	19.0	1916	11	1916.0	11.0	15.7	Single Age
12WPY41_103	116.00	2.60	0.78600	0.01200	0.09600	0.00120	0.39138	588.5	6.5	591.0	6.9	587	25	591.0	6.9	0.4	Single Age
12WPY41_104	254.00	1.07	1.66800	0.01500	0.16680	0.00120	0.54560	996.3	5.9	994.3	6.8	1007	12	994.3	6.8	0.2	Single Age
12WPY41_105	350.00	1.24	3.47600	0.08500	0.25290	0.00430	0.90202	1522.0	19.0	1453.0	22.0	1628	16	1628.0	16.0	10.7	Single Age
12WPY41_106	260.00	0.99	0.95200	0.01500	0.11030	0.00150	0.39691	678.5	7.7	674.4	8.8	695	21	674.4	8.8	0.6	Single Age
12WPY41_107	40.30	0.85	13.02000	0.13000	0.53950	0.00670	0.62383	2681.4	9.4	2781.0	28.0	2619	9	2618.5	9.3	6.2	Single Age
12WPY41_108	147.80	0.90	1.84000	0.02200	0.17940	0.00220	0.61899	1060.8	8.2	1066.0	12.0	1048	14	1066.0	12.0	0.5	Single Age
12WPY41_109	94.70	0.54	1.46900	0.02100	0.15260	0.00180	0.42619	917.2	8.5	915.6	9.9	953	18	915.6	9.9	0.2	Single Age
12WPY41_110	900.00	0.94	0.87200	0.03300	0.10410	0.00360	0.96315	636.0	18.0	638.0	21.0	654	12	638.0	21.0	0.3	Single Age
12WPY41_111	291.00	26.10	0.79700	0.01700	0.09730	0.00210	0.28895	594.9	9.3	599.0	12.0	588	34	599.0	12.0	0.7	Rim
12WPY41_111	416.00	5.71	1.65000	0.03900	0.14200	0.00280	0.89800	988.0	15.0	856.0	16.0	1305	14	DISC	DISC	13.4	Core
12WPY41_112	298.00	2.69	1.34000	0.06800	0.14120	0.00550	0.95192	855.0	31.0	850.0	31.0	873	33	850.0	31.0	0.6	Single Age
12WPY41_113	142.10	1.04	1.27000	0.01500	0.13950	0.00130	0.43296	832.0	6.6	842.0	7.1	813	12	842.0	7.1	1.2	Single Age
12WPY41_114	69.60	0.70	5.28000	0.06400	0.33630	0.00430	0.76457	1866.0	11.0	1868.0	21.0	1867	8	1867.4	7.6	0.0	Single Age
12WPY41_115	45.40	1.93	1.29800	0.02200	0.14140	0.00180	0.13863	844.2	9.7	852.0	10.0	834	25	852.0	10.0	0.9	Single Age
12WPY41_116	13.97	0.02	1.19100	0.04700	0.13090	0.00440	0.02566	798.0	21.0	792.0	25.0	853	58	792.0	25.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY41_117	604.00	3.75	1.56200	0.01800	0.16080	0.00180	0.65223	955.1	7.0	961.0	9.9	930	13	961.0	9.9	0.6	Single Age
12WPY41_118	327.00	13.99	0.87000	0.01100	0.10290	0.00130	0.58853	635.6	6.1	631.6	7.5	657	11	631.6	7.5	0.6	Single Age
12WPY41_119	132.30	1.14	8.44000	0.15000	0.37230	0.00570	0.76991	2279.0	16.0	2040.0	27.0	2510	12	2510.0	12.0	18.7	Single Age
12WPY41_120	140.30	1.37	4.90400	0.08400	0.29610	0.00400	0.80334	1802.0	15.0	1671.0	20.0	1969	12	1969.0	12.0	15.1	Single Age
12WPY41_121	659.00	20.10	3.45600	0.05600	0.23680	0.00340	0.92332	1518.0	13.0	1370.0	18.0	1732	8	1731.5	8.0	20.9	Single Age
12WPY41_122	1063.00	2.37	1.25200	0.04400	0.11150	0.00082	0.12994	821.0	19.0	681.4	4.8	1216	65	DISC	DISC	17.0	Single Age
12WPY41_123	821.00	13.59	1.28200	0.01600	0.13770	0.00140	0.79148	838.6	7.0	831.7	7.9	867	11	831.7	7.9	0.8	Single Age
12WPY41_124	123.70	0.97	5.97000	0.14000	0.35460	0.00570	0.59682	1969.0	20.0	1956.0	27.0	1990	19	1990.0	19.0	1.7	Single Age
12WPY42_1	122.50	1.28	0.58120	0.00950	0.07475	0.00094	0.69452	464.9	6.1	464.6	5.7	479	33	464.6	5.7	0.1	Single Age
12WPY42_2	23.20	1.77	0.88500	0.02700	0.10520	0.00210	0.21325	641.0	15.0	644.0	12.0	640	70	644.0	12.0	0.5	Single Age
12WPY42_3	202.20	2.94	0.77800	0.01300	0.09430	0.00140	0.56860	583.8	7.3	581.0	8.3	577	31	581.0	8.3	0.5	Single Age
12WPY42_4	265.00	4.60	1.28300	0.03100	0.13840	0.00340	0.70426	838.0	14.0	835.0	19.0	852	36	835.0	19.0	0.4	Single Age
12WPY42_5	159.00	1.97	0.55200	0.01200	0.07080	0.00100	0.64753	446.8	7.7	441.0	6.3	459	36	441.0	6.3	1.3	Single Age
12WPY42_6	185.40	1.67	13.74300	0.09900	0.53200	0.00490	0.74675	2731.8	6.8	2749.0	20.0	2715	10	2715.1	9.9	1.2	Single Age
12WPY42_7	73.80	1.93	0.85800	0.01300	0.10500	0.00110	0.23413	628.9	6.8	643.4	6.7	582	41	643.4	6.7	2.3	Single Age
12WPY42_8	488.00	1.94	0.58990	0.00840	0.07570	0.00110	0.75026	472.6	5.4	470.6	6.4	467	23	470.6	6.4	0.4	Single Age
12WPY42_9	304.00	2.95	0.97400	0.04200	0.11350	0.00460	0.77241	690.0	22.0	693.0	27.0	678	61	693.0	27.0	0.4	Rim
12WPY42_9	107.10	1.90	1.42900	0.02700	0.15010	0.00230	0.44445	900.0	11.0	901.0	13.0	909	37	901.0	13.0	0.1	Core
12WPY42_10	254.00	1.60	5.58200	0.04400	0.34170	0.00310	0.68178	1913.7	6.9	1895.0	15.0	1925	12	1925.0	12.0	1.6	Single Age
12WPY42_11	104.80	0.74	1.74800	0.02200	0.17760	0.00190	0.52246	1028.1	8.6	1054.0	11.0	982	25	1054.0	11.0	2.5	Single Age
12WPY42_12	593.00	3.87	0.90620	0.00910	0.10810	0.00100	0.71864	654.8	4.8	661.8	5.9	626	16	661.8	5.9	1.1	Single Age
12WPY42_13	74.60	0.63	4.76900	0.06900	0.29870	0.00420	0.71093	1780.0	12.0	1684.0	21.0	1881	20	1881.0	20.0	10.5	Single Age
12WPY42_14	136.90	2.33	0.61100	0.01100	0.07958	0.00087	0.25975	483.7	6.8	493.6	5.2	410	42	493.6	5.2	2.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY42_15	151.20	1.17	0.72500	0.01200	0.08950	0.00130	0.54048	553.1	6.9	552.7	7.8	573	27	552.7	7.8	0.1	Single Age
12WPY42_16	242.00	1.36	0.92300	0.01300	0.10950	0.00180	0.75767	664.3	6.7	670.0	10.0	632	23	670.0	10.0	0.9	Single Age
12WPY42_17	311.00	2.90	7.87000	0.27000	0.41200	0.00640	0.84888	2222.0	29.0	2223.0	29.0	2221	35	2221.0	35.0	0.1	Single Age
12WPY42_18	905.00	4.89	0.60400	0.01300	0.08020	0.00210	0.69910	479.4	8.4	497.0	12.0	419	42	497.0	12.0	3.7	Rim
12WPY42_18	462.00	7.00	4.35800	0.08300	0.28310	0.00630	0.78461	1707.0	17.0	1607.0	32.0	1812	27	1812.0	27.0	11.3	Core
12WPY42_19	220.40	1.99	0.65900	0.02700	0.08490	0.00290	0.69831	513.0	17.0	525.0	17.0	503	62	525.0	17.0	2.3	Rim
12WPY42_19	153.50	0.75	1.11900	0.01500	0.12460	0.00130	0.13456	762.3	7.3	757.0	7.7	762	35	757.0	7.7	0.7	Core
12WPY42_20	109.00	1.54	0.58000	0.01100	0.07422	0.00087	0.26903	465.1	6.9	461.5	5.2	499	42	461.5	5.2	0.8	Single Age
12WPY42_21	173.00	1.74	0.57130	0.00790	0.07409	0.00080	0.26858	458.6	5.1	460.7	4.8	457	34	460.7	4.8	0.5	Single Age
12WPY42_22	23.70	3.78	0.92800	0.03000	0.10830	0.00220	0.14330	664.0	16.0	662.0	13.0	693	75	662.0	13.0	0.3	Single Age
12WPY42_23	69.00	0.63	0.75000	0.01600	0.09120	0.00140	0.11756	567.5	9.3	562.5	8.0	598	50	562.5	8.0	0.9	Single Age
12WPY42_24	247.00	0.97	2.62600	0.03600	0.21920	0.00390	0.67916	1308.4	9.9	1277.0	20.0	1366	23	1366.0	23.0	6.5	Single Age
12WPY42_25	596.00	25.80	0.78100	0.01200	0.09270	0.00120	0.43356	586.0	6.6	571.4	7.1	661	36	571.4	7.1	2.5	Rim
12WPY42_25	84.80	0.71	3.82000	0.07300	0.25310	0.00430	0.67042	1596.0	15.0	1454.0	22.0	1776	27	1776.0	27.0	18.1	Core
12WPY42_26	400.00	5.22	0.78400	0.01000	0.09480	0.00120	0.66155	587.5	5.7	583.9	6.8	604	24	583.9	6.8	0.6	Single Age
12WPY42_27	116.40	1.62	0.53290	0.00790	0.06810	0.00100	0.44565	433.5	5.2	424.5	6.2	474	37	424.5	6.2	2.1	Single Age
12WPY42_28	121.10	4.50	0.60500	0.02500	0.07620	0.00280	0.39660	480.0	16.0	473.0	17.0	509	74	473.0	17.0	1.5	Rim
12WPY42_28	37.20	0.64	0.81000	0.02300	0.09710	0.00160	0.06997	602.0	13.0	597.5	9.2	604	67	597.5	9.2	0.7	Core
12WPY42_29	286.00	1.61	1.11400	0.01300	0.12620	0.00140	0.59972	760.8	6.3	766.1	8.2	752	21	766.1	8.2	0.7	Single Age
12WPY42_30	70.80	1.18	1.03700	0.01700	0.11710	0.00160	0.30171	722.8	8.6	713.5	9.2	772	38	713.5	9.2	1.3	Single Age
12WPY42_31	120.40	0.92	0.92500	0.02600	0.10770	0.00250	0.58055	664.0	14.0	659.0	14.0	690	51	659.0	14.0	0.8	Rim
12WPY42_31	190.80	0.56	1.53300	0.02500	0.15740	0.00260	0.33704	943.4	9.9	942.0	15.0	965	40	942.0	15.0	0.1	Core
12WPY42_32	82.80	1.85	0.89900	0.01500	0.10510	0.00120	0.45744	650.4	7.8	644.1	7.1	663	34	644.1	7.1	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY42_33	91.10	0.76	1.85700	0.03100	0.17730	0.00210	0.36798	1065.0	11.0	1052.0	12.0	1100	35	1052.0	12.0	1.2	Single Age
12WPY42_34	165.40	0.74	1.60100	0.01700	0.16000	0.00110	0.19336	971.2	6.4	956.6	6.1	1018	24	956.6	6.1	1.5	Single Age
12WPY42_35	54.50	0.90	1.70500	0.02300	0.17000	0.00170	0.14730	1011.1	8.4	1011.9	9.5	1036	33	1011.9	9.5	0.1	Single Age
12WPY42_36	499.00	1.71	0.88300	0.01400	0.10390	0.00120	0.59444	642.3	7.7	638.2	7.4	671	31	638.2	7.4	0.6	Rim
12WPY42_36	320.00	0.95	1.00600	0.02300	0.11330	0.00160	0.51640	706.0	11.0	692.1	9.1	744	35	692.1	9.1	2.0	Core
12WPY42_37	304.00	1.53	0.88200	0.01000	0.10650	0.00140	0.67782	642.4	5.8	652.4	8.3	621	25	652.4	8.3	1.6	Single Age
12WPY42_38	96.60	0.79	1.56300	0.02500	0.15850	0.00250	0.23907	959.0	10.0	950.0	14.0	974	39	950.0	14.0	0.9	Single Age
12WPY42_39	127.00	1.86	0.54800	0.01000	0.07081	0.00087	0.42160	443.1	6.6	441.0	5.2	443	39	441.0	5.2	0.5	Single Age
12WPY42_41	96.20	3.72	0.87400	0.01400	0.10270	0.00130	0.21945	638.3	7.6	630.3	7.3	655	37	630.3	7.3	1.3	Single Age
12WPY42_43	115.80	1.08	0.94700	0.01200	0.11000	0.00140	0.27581	676.4	6.0	672.7	8.1	671	33	672.7	8.1	0.5	Single Age
12WPY42_42	130.00	1.57	4.79300	0.04700	0.30700	0.00310	0.56307	1783.2	8.2	1726.0	16.0	1841	18	1841.0	18.0	6.2	Single Age
12WPY42_44	190.00	0.78	6.35000	0.05800	0.33730	0.00290	0.52530	2024.9	8.0	1873.0	14.0	2178	14	2178.0	14.0	14.0	Single Age
12WPY42_45	125.80	1.30	1.49200	0.01900	0.15180	0.00170	0.58724	927.5	7.8	910.8	9.6	973	24	910.8	9.6	1.8	Single Age
12WPY42_46	121.00	1.58	0.56340	0.00760	0.07219	0.00082	0.19185	454.5	5.1	449.3	4.9	484	38	449.3	4.9	1.1	Single Age
12WPY42_47	33.55	0.97	1.40200	0.02600	0.14420	0.00170	0.37354	889.0	11.0	868.1	9.7	973	37	868.1	9.7	2.4	Single Age
12WPY42_48	208.00	2.61	0.54700	0.01100	0.06970	0.00100	0.58500	442.6	7.2	434.5	6.3	490	37	434.5	6.3	1.8	Single Age
12WPY42_49	139.20	7.09	0.76500	0.01000	0.09420	0.00120	0.30081	576.9	5.7	580.5	6.9	560	33	580.5	6.9	0.6	Single Age
12WPY42_50	191.30	1.38	0.82300	0.01200	0.09780	0.00110	0.50980	609.2	6.8	601.6	6.2	637	28	601.6	6.2	1.2	Single Age
12WPY42_51	87.50	3.04	11.79000	0.28000	0.46800	0.01000	0.83600	2586.0	22.0	2474.0	45.0	2662	23	2662.0	23.0	7.1	Single Age
12WPY42_52	142.00	2.47	0.59400	0.02600	0.07520	0.00220	0.54158	473.0	17.0	468.0	13.0	475	76	468.0	13.0	1.1	Rim
12WPY42_52	40.60	3.07	1.02600	0.02600	0.11720	0.00260	0.07999	716.0	13.0	714.0	15.0	726	74	714.0	15.0	0.3	Core
12WPY42_53	20.77	0.50	1.61200	0.03800	0.15940	0.00250	0.36215	973.0	15.0	953.0	14.0	1035	45	953.0	14.0	2.1	Single Age
12WPY42_54	228.00	5.31	0.68590	0.00790	0.08721	0.00081	0.29526	530.1	4.8	539.0	4.8	499	29	539.0	4.8	1.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY42_55	105.80	1.56	0.49250	0.00860	0.06370	0.00100	0.28630	406.4	5.9	398.1	6.1	465	50	398.1	6.1	2.0	Single Age
12WPY42_56	139.00	1.96	0.58100	0.01300	0.07520	0.00130	0.63960	464.7	8.4	467.3	7.6	482	36	467.3	7.6	0.6	Single Age
12WPY42_57	253.00	13.67	0.83100	0.01100	0.10080	0.00120	0.54865	613.7	6.0	619.1	6.9	592	25	619.1	6.9	0.9	Single Age
12WPY42_58	101.80	0.88	5.46100	0.05400	0.32960	0.00370	0.54439	1894.1	8.5	1836.0	18.0	1951	16	1951.0	16.0	5.9	Single Age
12WPY42_59	88.90	0.84	0.53900	0.01100	0.06930	0.00110	0.28545	438.2	7.7	431.7	6.7	470	49	431.7	6.7	1.5	Single Age
12WPY42_60	184.20	17.30	0.94910	0.00960	0.11150	0.00110	0.33011	677.4	5.0	681.5	6.4	668	26	681.5	6.4	0.6	Single Age
12WPY42_61	507.50	5.99	4.36100	0.04500	0.26440	0.00340	0.84736	1704.5	8.5	1512.0	17.0	1956	14	1956.0	14.0	22.7	Single Age
12WPY42_62	522.00	0.98	0.54100	0.00840	0.07050	0.00110	0.67162	438.8	5.5	438.9	6.5	443	28	438.9	6.5	0.0	Single Age
12WPY42_63	148.00	1.43	1.20100	0.02500	0.12750	0.00190	0.71230	800.0	12.0	774.0	11.0	874	27	774.0	11.0	3.3	Single Age
12WPY42_64	96.70	1.04	1.63200	0.02400	0.15920	0.00240	0.53541	983.7	8.9	954.0	14.0	1048	33	954.0	14.0	3.0	Single Age
12WPY42_65	105.70	0.95	1.30500	0.02100	0.13950	0.00220	0.72589	848.7	9.1	842.0	13.0	868	27	842.0	13.0	0.8	Single Age
12WPY42_66	231.00	1.13	7.05900	0.08400	0.38950	0.00460	0.88824	2118.0	11.0	2120.0	21.0	2111	10	2110.5	9.6	0.5	Single Age
12WPY42_67	118.00	2.28	1.60900	0.02000	0.16400	0.00180	0.47446	973.2	7.9	980.7	9.8	961	22	980.7	9.8	0.8	Single Age
12WPY42_68	143.00	1.96	1.20000	0.01400	0.12580	0.00140	0.50131	800.4	6.3	763.9	7.9	903	23	763.9	7.9	4.6	Single Age
12WPY42_69	57.90	2.05	11.89000	0.18000	0.49220	0.00680	0.76336	2594.0	14.0	2579.0	29.0	2620	21	2620.0	21.0	1.6	Single Age
12WPY42_70	24.10	0.56	0.92000	0.03000	0.10440	0.00250	0.17341	660.0	16.0	640.0	15.0	716	73	640.0	15.0	3.0	Single Age
12WPY42_71	157.10	0.61	1.77100	0.01900	0.17420	0.00130	0.39232	1034.5	6.8	1036.1	7.3	1025	19	1036.1	7.3	0.2	Single Age
12WPY42_72	161.90	1.00	0.99800	0.01200	0.11530	0.00110	0.18743	702.7	5.9	703.2	6.3	700	27	703.2	6.3	0.1	Single Age
12WPY42_73	255.00	2.47	0.57340	0.00920	0.07479	0.00098	0.30296	459.9	6.0	464.9	5.9	467	40	464.9	5.9	1.1	Single Age
12WPY42_74	57.70	0.44	0.84700	0.01800	0.09620	0.00130	0.03818	622.3	9.6	592.1	7.5	746	51	592.1	7.5	4.9	Single Age
12WPY42_75	73.40	2.49	1.76100	0.03300	0.17240	0.00310	0.74363	1035.0	12.0	1025.0	17.0	1034	28	1025.0	17.0	1.0	Single Age
12WPY42_76	383.00	9.60	0.76240	0.00890	0.09330	0.00120	0.55408	575.2	5.1	575.1	7.3	555	26	575.1	7.3	0.0	Single Age
12WPY42_77	58.00	0.53	4.92300	0.05400	0.31660	0.00370	0.55387	1805.4	9.3	1773.0	18.0	1851	21	1851.0	21.0	4.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY42_78	441.00	0.71	0.83330	0.00910	0.09930	0.00110	0.56725	615.2	5.0	610.5	6.5	633	22	610.5	6.5	0.8	Single Age
12WPY42_79	107.00	0.68	1.77700	0.02500	0.17500	0.00220	0.50446	1037.3	9.3	1040.0	12.0	1019	26	1040.0	12.0	0.3	Single Age
12WPY42_80	318.40	2.19	0.79450	0.00830	0.09660	0.00110	0.60112	594.1	4.8	594.1	6.5	572	21	594.1	6.5	0.0	Single Age
12WPY42_81	607.00	13.02	0.89770	0.00730	0.10547	0.00084	0.57864	650.4	3.9	646.3	4.9	660	16	646.3	4.9	0.6	Single Age
12WPY42_82	150.50	1.38	2.30200	0.02100	0.19480	0.00150	0.44444	1213.4	6.5	1147.3	7.9	1337	17	1147.3	7.9	5.4	Single Age
12WPY42_83	68.60	0.92	0.74200	0.01500	0.08950	0.00110	0.29156	565.5	8.4	552.6	6.4	637	43	552.6	6.4	2.3	Single Age
12WPY42_84	43.60	1.50	1.55600	0.02600	0.16030	0.00270	0.08638	953.0	10.0	958.0	15.0	955	48	958.0	15.0	0.5	Single Age
12WPY42_85	162.00	1.50	0.54500	0.01000	0.07002	0.00087	0.51985	441.3	6.6	436.3	5.2	440	34	436.3	5.2	1.1	Single Age
12WPY42_86	148.80	2.06	0.93000	0.01200	0.10790	0.00110	0.33157	669.8	6.7	660.4	6.3	706	29	660.4	6.3	1.4	Single Age
12WPY42_87	140.60	2.09	1.65600	0.02100	0.16540	0.00190	0.66555	992.4	8.0	986.0	11.0	1024	21	986.0	11.0	0.6	Single Age
12WPY42_88	35.50	0.51	1.77300	0.05800	0.16980	0.00370	0.45035	1035.0	21.0	1010.0	20.0	1071	50	1010.0	20.0	2.4	Single Age
12WPY42_89	251.20	4.94	1.41500	0.01900	0.14720	0.00160	0.75954	894.7	7.9	885.1	9.2	901	19	885.1	9.2	1.1	Single Age
12WPY42_90	197.30	1.32	0.53960	0.00800	0.06957	0.00086	0.47116	437.9	5.3	433.5	5.2	458	34	433.5	5.2	1.0	Single Age
12WPY42_91	98.90	2.16	6.07400	0.07600	0.35680	0.00450	0.83056	1986.0	11.0	1966.0	22.0	2010	15	2010.0	15.0	2.2	Single Age
12WPY42_92	499.00	2.76	10.66000	0.12000	0.43300	0.00610	0.83250	2493.0	10.0	2319.0	28.0	2640	13	2640.0	13.0	12.2	Single Age
12WPY42_93	36.30	0.37	0.92000	0.03200	0.09640	0.00290	0.76836	663.0	16.0	593.0	17.0	915	50	DISC	DISC	10.6	Single Age
12WPY42_94	247.00	1.81	0.53240	0.00780	0.06933	0.00086	0.39254	433.2	5.2	432.1	5.2	439	34	432.1	5.2	0.3	Single Age
12WPY42_95	254.00	1.98	0.57830	0.00860	0.07440	0.00120	0.64476	463.1	5.5	462.5	7.3	470	28	462.5	7.3	0.1	Single Age
12WPY42_96	463.00	2.82	0.56000	0.00790	0.07230	0.00074	0.48433	451.3	5.2	450.0	4.5	465	29	450.0	4.5	0.3	Single Age
12WPY42_97	409.00	43.50	0.94600	0.01800	0.11220	0.00170	0.62520	675.6	9.4	685.4	9.6	668	31	685.4	9.6	1.5	Rim
12WPY42_97	216.00	1.82	2.06500	0.04500	0.19120	0.00330	0.65459	1136.0	15.0	1128.0	18.0	1161	36	1128.0	18.0	0.7	Core
12WPY42_98	162.00	1.42	0.56960	0.00850	0.07432	0.00090	0.58665	457.5	5.5	462.1	5.4	441	28	462.1	5.4	1.0	Single Age
12WPY42_99	52.20	0.68	4.16000	0.16000	0.25590	0.00950	0.93862	1663.0	32.0	1473.0	48.0	1916	25	1916.0	25.0	23.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY42_100	100.10	0.56	5.38500	0.04800	0.33350	0.00320	0.49838	1882.0	7.7	1855.0	15.0	1907	17	1907.0	17.0	2.7	Single Age
12WPY42_101	21.70	0.39	1.54900	0.03700	0.15840	0.00270	0.47666	950.0	14.0	948.0	15.0	962	38	948.0	15.0	0.2	Single Age
12WPY42_102	335.00	2.29	0.55770	0.00770	0.07182	0.00061	0.39164	449.9	5.0	447.1	3.7	466	28	447.1	3.7	0.6	Single Age
12WPY42_103	171.00	2.45	10.93000	0.14000	0.45570	0.00690	0.75531	2516.0	12.0	2419.0	30.0	2595	16	2595.0	16.0	6.8	Single Age
12WPY42_104	247.00	2.71	0.09720	0.00250	0.01473	0.00021	0.09159	94.2	2.3	94.2	1.3	112	62	94.2	1.3	0.0	Single Age
12WPY42_105	43.50	0.79	1.02600	0.02300	0.11620	0.00180	0.04541	716.0	12.0	710.0	10.0	728	55	710.0	10.0	0.8	Single Age
12WPY42_106	737.00	3.25	0.82320	0.00660	0.09871	0.00098	0.68756	609.7	3.7	606.8	5.7	614	19	606.8	5.7	0.5	Single Age
12WPY42_107	173.00	1.66	0.57900	0.01400	0.07348	0.00095	0.44886	463.4	8.7	457.1	5.7	507	46	457.1	5.7	1.4	Single Age
12WPY42_108	85.20	2.77	0.88500	0.01400	0.10190	0.00110	0.23092	645.8	7.2	625.5	6.4	701	35	625.5	6.4	3.1	Single Age
12WPY42_109	151.00	2.83	0.52800	0.01100	0.06780	0.00110	0.01479	430.3	7.4	422.7	6.5	449	71	422.7	6.5	1.8	Single Age
12WPY42_110	105.40	1.99	0.54360	0.00810	0.06996	0.00079	0.29184	440.6	5.3	435.9	4.7	474	38	435.9	4.7	1.1	Single Age
12WPY42_111	126.50	0.78	1.18800	0.02800	0.12880	0.00210	0.76103	794.0	13.0	781.0	12.0	853	32	781.0	12.0	1.6	Single Age
12WPY42_112	231.00	1.87	0.53520	0.00970	0.06820	0.00120	0.50679	435.9	6.6	425.4	7.2	493	34	425.4	7.2	2.4	Single Age
12WPY42_113	127.00	1.10	0.81700	0.01400	0.08940	0.00170	0.42524	605.7	7.7	552.0	10.0	801	39	552.0	10.0	8.9	Single Age
12WPY42_114	246.00	1.71	0.53040	0.00820	0.06844	0.00080	0.31761	431.8	5.4	426.7	4.8	459	36	426.7	4.8	1.2	Single Age
12WPY42_115	95.00	1.52	6.76300	0.07100	0.38060	0.00370	0.83200	2080.2	9.3	2079.0	17.0	2059	14	2059.0	14.0	1.0	Single Age
12WPY42_116	590.00	4.52	0.75500	0.01400	0.09250	0.00160	0.77811	572.3	8.3	570.0	9.5	600	28	570.0	9.5	0.4	Single Age
12WPY42_117	260.00	2.42	0.92000	0.01800	0.10890	0.00260	0.76548	662.2	9.5	666.0	15.0	644	31	666.0	15.0	0.6	Single Age
12WPY42_118	242.00	1.75	0.95000	0.01200	0.11200	0.00150	0.55022	677.6	6.1	684.4	8.4	657	24	684.4	8.4	1.0	Single Age
12WPY42_119	245.00	4.85	5.75400	0.04700	0.33800	0.00300	0.60619	1939.2	7.1	1877.0	14.0	2009	15	2009.0	15.0	6.6	Single Age
12WPY42_120	53.40	1.24	0.89100	0.02200	0.10330	0.00140	0.33240	649.0	12.0	633.6	7.9	679	54	633.6	7.9	2.4	Single Age
12WPY42_121	386.00	6.20	0.97200	0.03200	0.11220	0.00310	0.94033	690.0	16.0	685.0	18.0	736	25	685.0	18.0	0.7	Single Age
12WPY42_123	436.00	4.40	0.95300	0.01500	0.11080	0.00130	0.24700	679.7	8.0	677.6	7.6	696	37	677.6	7.6	0.3	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY42_123	291.10	0.64	1.24400	0.02100	0.13320	0.00180	0.58857	820.3	9.3	806.0	10.0	870	36	806.0	10.0	1.7	Core
12WPY42_124	194.00	3.39	1.20600	0.03700	0.12830	0.00270	0.79202	801.0	17.0	778.0	15.0	863	34	778.0	15.0	2.9	Single Age
12WPY43_1	1232.00	1.70	1.50200	0.03400	0.14900	0.00280	0.95240	931.0	14.0	895.0	16.0	1005	15	895.0	16.0	3.9	Single Age
12WPY43_2	1560.00	2.58	1.54300	0.02200	0.15160	0.00190	0.64421	947.0	8.8	910.0	10.0	1035	12	910.0	10.0	3.9	Single Age
12WPY43_3	36.00	1.39	0.98700	0.01600	0.11070	0.00120	0.29893	696.6	7.9	676.8	6.9	778	23	676.8	6.9	2.8	Single Age
12WPY43_4	537.00	1.79	1.28000	0.02900	0.12710	0.00210	0.23456	836.0	13.0	773.0	13.0	1018	39	773.0	13.0	7.5	Single Age
12WPY43_5	240.00	5.38	0.94500	0.01200	0.11040	0.00160	0.65154	675.3	6.4	675.0	9.5	665	14	675.0	9.5	0.0	Single Age
12WPY43_6	493.00	2.07	4.77300	0.09800	0.24130	0.00460	0.85598	1779.0	17.0	1393.0	24.0	2264	13	DISC	DISC	38.5	Single Age
12WPY43_7	269.00	2.81	5.68400	0.08800	0.33770	0.00510	0.80561	1930.0	14.0	1879.0	25.0	2015	14	2015.0	14.0	6.7	Single Age
12WPY43_8	665.00	18.50	0.85260	0.00990	0.10100	0.00110	0.74572	625.9	5.4	620.3	6.7	648	12	620.3	6.7	0.9	Single Age
12WPY43_9	429.20	4.71	5.35000	0.17000	0.28600	0.00940	0.94308	1885.0	27.0	1620.0	47.0	2179	12	2179.0	12.0	25.7	Single Age
12WPY43_10	57.00	1.79	0.86300	0.01600	0.10070	0.00190	0.63754	631.2	8.6	618.0	11.0	681	27	618.0	11.0	2.1	Single Age
12WPY43_11	306.00	0.91	4.53900	0.05700	0.28930	0.00350	0.56871	1738.0	10.0	1638.0	18.0	1848	21	1848.0	21.0	11.4	Single Age
12WPY43_12	227.00	0.86	1.46100	0.02000	0.14680	0.00210	0.68700	913.8	8.2	883.0	12.0	978	12	883.0	12.0	3.4	Single Age
12WPY43_13	541.00	13.23	0.95300	0.02100	0.11460	0.00220	0.74038	679.0	11.0	699.0	13.0	620	19	699.0	13.0	2.9	Single Age
12WPY43_14	216.40	3.48	1.15500	0.03500	0.12060	0.00340	0.77573	778.0	16.0	733.0	20.0	903	35	733.0	20.0	5.8	Single Age
12WPY43_15	203.00	0.76	1.69300	0.02600	0.16920	0.00260	0.84888	1005.0	10.0	1008.0	14.0	991	12	1008.0	14.0	0.3	Single Age
12WPY43_16	241.00	1.75	1.87300	0.05300	0.17820	0.00480	0.83402	1071.0	19.0	1057.0	26.0	1088	14	1057.0	26.0	1.3	Single Age
12WPY43_17	59.10	0.69	2.28300	0.04300	0.18420	0.00380	0.75917	1206.0	13.0	1089.0	20.0	1402	17	1089.0	20.0	9.7	Single Age
12WPY43_18	441.00	2.60	3.02400	0.03100	0.21150	0.00280	0.72219	1413.5	7.9	1236.0	15.0	1687	11	1687.0	11.0	26.7	Single Age
12WPY43_19	188.30	1.14	1.61600	0.02700	0.15940	0.00220	0.48078	976.0	10.0	953.0	13.0	1020	16	953.0	13.0	2.4	Single Age
12WPY43_20	124.60	1.16	1.58100	0.01800	0.15890	0.00200	0.68314	962.5	7.0	950.0	11.0	1006	13	950.0	11.0	1.3	Single Age
12WPY43_21	143.00	0.83	1.60000	0.02400	0.16240	0.00270	0.79726	969.9	9.4	970.0	15.0	989	14	970.0	15.0	0.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY43_22	188.00	1.78	1.03300	0.02100	0.11050	0.00180	0.72651	720.0	10.0	675.0	10.0	853	22	675.0	10.0	6.3	Single Age
12WPY43_23	434.00	1.70	7.34000	0.18000	0.35320	0.00710	0.75149	2152.0	22.0	1949.0	34.0	2354	20	2354.0	20.0	17.2	Single Age
12WPY43_24	210.90	4.90	1.63600	0.04100	0.15470	0.00370	0.90659	983.0	16.0	927.0	21.0	1113	12	927.0	21.0	5.7	Single Age
12WPY43_25	494.00	27.70	0.89460	0.00840	0.10420	0.00110	0.66506	648.7	4.5	638.8	6.2	689	10	638.8	6.2	1.5	Rim
12WPY43_25	256.00	1.28	1.14900	0.01700	0.12950	0.00220	0.77772	776.3	8.0	785.0	12.0	761	12	785.0	12.0	1.1	Core
12WPY43_26	402.00	0.75	0.73120	0.00720	0.09013	0.00070	0.53267	557.1	4.2	556.3	4.1	568	12	556.3	4.1	0.1	Single Age
12WPY43_27	65.70	2.05	2.52900	0.02800	0.21840	0.00230	0.65488	1279.7	8.1	1273.0	12.0	1292	14	1292.0	14.0	1.5	Single Age
12WPY43_28	728.00	11.30	1.74500	0.04600	0.16510	0.00490	0.87705	1025.0	17.0	985.0	27.0	1110	15	985.0	27.0	3.9	Rim
12WPY43_28	467.00	0.98	3.41100	0.05500	0.23900	0.00390	0.81445	1509.0	12.0	1381.0	20.0	1673	11	1673.0	11.0	17.5	Core
12WPY43_30	320.00	8.20	1.14100	0.02700	0.12460	0.00270	0.86148	773.0	13.0	757.0	15.0	855	20	757.0	15.0	2.1	Rim
12WPY43_30	262.00	0.51	4.49500	0.06600	0.28670	0.00380	0.82436	1729.0	12.0	1625.0	19.0	1837	17	1837.0	17.0	11.5	Core
12WPY43_31	91.40	0.82	1.41800	0.01600	0.14960	0.00160	0.63001	896.0	6.8	899.9	9.3	894	13	899.9	9.3	0.4	Single Age
12WPY43_32	400.00	0.25	0.93700	0.01900	0.10660	0.00250	0.81117	672.0	10.0	653.0	15.0	731	15	653.0	15.0	2.8	Single Age
12WPY43_33	627.00	1.85	1.48300	0.02500	0.15350	0.00350	0.81914	923.0	10.0	920.0	20.0	951	16	920.0	20.0	0.3	Single Age
12WPY43_34	278.00	1.55	1.50700	0.01700	0.15640	0.00180	0.77882	932.7	6.8	936.9	9.8	933	10	936.9	9.8	0.5	Single Age
12WPY43_35	430.00	0.58	0.97300	0.02100	0.11420	0.00270	0.75354	689.0	11.0	697.0	16.0	659	25	697.0	16.0	1.2	Single Age
12WPY43_36	1227.00	6.08	0.81720	0.00800	0.09575	0.00089	0.71285	606.9	4.4	589.4	5.2	671	9	589.4	5.2	2.9	Single Age
12WPY43_37	183.00	0.68	4.69000	0.17000	0.29950	0.00980	0.97671	1761.0	29.0	1685.0	48.0	1854	10	1853.7	9.7	9.1	Single Age
12WPY43_40	119.00	0.49	0.84800	0.01100	0.10170	0.00120	0.58742	623.2	5.8	624.1	7.3	629	14	624.1	7.3	0.1	Single Age
12WPY43_41	132.20	1.73	1.13400	0.01800	0.12650	0.00170	0.87015	770.2	8.5	767.9	9.7	777	13	767.9	9.7	0.3	Single Age
12WPY43_42	474.00	0.78	0.83400	0.01200	0.09990	0.00130	0.80656	615.4	6.3	613.5	7.6	629	13	613.5	7.6	0.3	Single Age
12WPY43_43	466.00	9.27	1.06400	0.01400	0.12060	0.00170	0.69297	735.4	6.9	733.9	9.7	736	12	733.9	9.7	0.2	Single Age
12WPY43_44	471.00	14.90	2.20400	0.02200	0.19650	0.00170	0.72805	1183.0	6.7	1156.4	9.0	1220	8	1156.4	9.0	2.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY43_45	98.00	10.50	0.77200	0.03000	0.09400	0.00340	0.76171	580.0	17.0	579.0	20.0	577	37	579.0	20.0	0.2	Single Age
12WPY43_46	455.00	2.74	1.61200	0.02800	0.15810	0.00270	0.93585	974.0	11.0	946.0	15.0	1038	17	946.0	15.0	2.9	Single Age
12WPY43_47	260.00	5.35	0.87300	0.01200	0.10160	0.00150	0.75567	636.5	6.7	623.7	8.5	668	14	623.7	8.5	2.0	Single Age
12WPY43_48	328.00	0.58	1.41600	0.02300	0.14320	0.00190	0.67792	894.8	9.5	863.0	11.0	971	17	863.0	11.0	3.6	Single Age
12WPY43_49	906.00	5.67	0.90900	0.01300	0.10530	0.00130	0.75041	656.6	7.1	645.3	7.4	691	15	645.3	7.4	1.7	Single Age
12WPY43_50	176.00	1.35	1.12000	0.01200	0.12500	0.00110	0.21897	762.8	5.9	759.1	6.5	780	11	759.1	6.5	0.5	Single Age
12WPY43_51	141.00	1.06	5.04000	0.10000	0.31010	0.00560	0.93153	1824.0	17.0	1740.0	27.0	1923	10	1922.5	9.5	9.5	Single Age
12WPY43_52	528.00	38.60	0.74000	0.01700	0.08640	0.00260	0.57569	562.0	10.0	534.0	15.0	668	27	534.0	15.0	5.0	Rim
12WPY43_52	216.10	1.91	1.06500	0.01400	0.12270	0.00170	0.77751	737.3	7.0	745.8	9.8	702	16	745.8	9.8	1.2	Core
12WPY43_54	1200.00	21.50	0.91700	0.02300	0.10640	0.00300	0.57339	661.0	12.0	652.0	17.0	722	25	652.0	17.0	1.4	Single Age
12WPY43_55	697.00	1.04	0.83900	0.01400	0.09980	0.00210	0.83991	618.2	7.9	613.0	12.0	646	11	613.0	12.0	0.8	Single Age
12WPY43_56	1645.00	6.60	0.90100	0.01000	0.10126	0.00096	0.58053	652.3	5.4	621.8	5.6	750	11	621.8	5.6	4.7	Single Age
12WPY43_58	243.00	0.64	1.82600	0.01700	0.17780	0.00140	0.67146	1055.6	5.9	1054.7	7.9	1057	9	1054.7	7.9	0.1	Single Age
12WPY43_59	443.00	0.57	0.83200	0.01300	0.09730	0.00150	0.75412	614.3	7.0	598.4	8.9	671	13	598.4	8.9	2.6	Single Age
12WPY43_61	248.10	2.00	1.11700	0.01300	0.12480	0.00150	0.69850	761.9	5.8	758.0	8.4	764	11	758.0	8.4	0.5	Single Age
12WPY43_63	1094.00	11.74	2.30100	0.02700	0.19500	0.00250	0.70700	1212.1	8.4	1148.0	14.0	1332	13	1148.0	14.0	5.3	Single Age
12WPY43_64	120.20	1.76	1.04300	0.02000	0.11830	0.00270	0.77601	724.5	9.7	721.0	15.0	743	17	721.0	15.0	0.5	Single Age
12WPY43_65	586.00	4.70	0.99700	0.02500	0.11070	0.00270	0.85988	705.0	12.0	676.0	16.0	783	18	676.0	16.0	4.1	Rim
12WPY43_65	293.00	0.45	1.33700	0.02600	0.14050	0.00350	0.47041	862.0	11.0	847.0	20.0	901	30	847.0	20.0	1.7	Core
12WPY43_66	300.00	1.30	11.30000	0.13000	0.46620	0.00500	0.80353	2549.0	11.0	2466.0	22.0	2607	7	2607.3	7.1	5.4	Single Age
12WPY43_67	1239.00	26.80	0.84640	0.00990	0.09810	0.00150	0.54290	622.6	5.5	603.0	8.6	699	21	603.0	8.6	3.1	Single Age
12WPY43_68	351.00	26.10	5.67200	0.06200	0.33290	0.00380	0.72840	1926.7	9.3	1852.0	18.0	2018	8	2018.3	8.0	8.2	Single Age
12WPY43_69	595.00	1.18	0.70040	0.00760	0.08474	0.00093	0.71522	538.9	4.5	524.3	5.5	615	9	524.3	5.5	2.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY43_70	396.20	0.83	1.18300	0.01400	0.12870	0.00130	0.61627	792.5	6.5	780.3	7.1	822	12	780.3	7.1	1.5	Single Age
12WPY43_71	682.00	1.27	1.27700	0.01200	0.13520	0.00120	0.73042	835.4	5.4	817.6	6.9	883	9	817.6	6.9	2.1	Single Age
12WPY43_72	589.00	3.49	0.86460	0.00720	0.09935	0.00099	0.73337	632.5	3.9	610.6	5.8	700	9	610.6	5.8	3.5	Single Age
12WPY43_74	1462.00	7.67	0.69880	0.00950	0.08070	0.00120	0.90953	537.8	5.6	500.1	6.9	683	9	500.1	6.9	7.0	Single Age
12WPY43_75	462.00	0.68	1.13100	0.02900	0.12660	0.00360	0.93761	767.0	14.0	768.0	21.0	765	14	768.0	21.0	0.1	Single Age
12WPY43_76	740.00	37.90	0.81680	0.00880	0.09647	0.00096	0.68585	606.1	4.9	593.6	5.7	653	9	593.6	5.7	2.1	Single Age
12WPY43_77	438.00	1.52	1.29100	0.02200	0.13820	0.00350	0.79490	841.5	9.8	834.0	20.0	869	17	834.0	20.0	0.9	Single Age
12WPY43_78	881.00	9.30	0.90000	0.02200	0.10100	0.00190	0.70225	652.0	12.0	620.0	11.0	764	16	620.0	11.0	4.9	Rim
12WPY43_78	324.00	2.66	1.28300	0.02700	0.13120	0.00200	0.61960	840.0	11.0	795.0	11.0	967	16	795.0	11.0	5.4	Core
12WPY43_79	81.60	1.02	1.04500	0.01600	0.12050	0.00190	0.68045	727.9	8.6	733.0	11.0	699	14	733.0	11.0	0.7	Single Age
12WPY43_80	30.50	10.20	0.86800	0.03000	0.09830	0.00250	0.14631	633.0	16.0	605.0	15.0	746	48	605.0	15.0	4.4	Rim
12WPY43_80	218.10	3.47	11.35000	0.24000	0.36270	0.00680	0.80833	2551.0	20.0	1994.0	32.0	3017	14	DISC	DISC	33.9	Core
12WPY43_81	73.60	0.85	0.85700	0.01400	0.10120	0.00140	0.48318	629.1	8.0	621.4	8.0	644	21	621.4	8.0	1.2	Single Age
12WPY43_82	703.00	2.84	0.88000	0.02500	0.10120	0.00290	0.86387	640.0	13.0	622.0	17.0	693	21	622.0	17.0	2.8	Rim
12WPY43_82	395.00	1.36	1.14100	0.02500	0.13080	0.00250	0.85117	773.0	12.0	792.0	14.0	723	13	792.0	14.0	2.5	Core
12WPY43_83	465.00	21.00	0.87400	0.01700	0.10130	0.00400	0.58272	637.9	9.1	622.0	23.0	702	18	622.0	23.0	2.5	Rim
12WPY43_83	232.00	0.84	1.76500	0.02000	0.17270	0.00210	0.70725	1033.7	7.6	1027.0	12.0	1029	13	1027.0	12.0	0.6	Core
12WPY43_84	205.20	0.84	2.25500	0.04500	0.20260	0.00420	0.76817	1198.0	14.0	1189.0	23.0	1248	13	1189.0	23.0	0.8	Single Age
12WPY43_85	172.60	1.85	9.93000	0.12000	0.42170	0.00450	0.81900	2428.0	12.0	2273.0	20.0	2570	8	2570.2	7.7	11.6	Single Age
12WPY43_86	166.90	1.00	4.14000	0.14000	0.26560	0.00650	0.90683	1660.0	28.0	1518.0	33.0	1827	17	1827.0	17.0	16.9	Single Age
12WPY43_87	189.00	5.40	0.87800	0.01900	0.10330	0.00230	0.65039	642.0	11.0	634.0	13.0	683	21	634.0	13.0	1.2	Rim
12WPY43_87	173.20	1.45	1.06000	0.01800	0.12040	0.00200	0.66732	733.5	8.7	733.0	11.0	722	15	733.0	11.0	0.1	Core
12WPY43_88	151.00	1.96	1.17000	0.03500	0.13050	0.00380	0.87589	785.0	17.0	791.0	22.0	788	17	791.0	22.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY43_89	500.00	7.40	0.90600	0.01900	0.10520	0.00200	0.78623	654.4	9.9	645.0	12.0	691	12	645.0	12.0	1.4	Single Age
12WPY43_90	379.00	2.08	7.83000	0.21000	0.33350	0.00900	0.95895	2207.0	25.0	1853.0	44.0	2530	10	2529.9	9.6	26.8	Single Age
12WPY43_91	290.00	2.82	8.70900	0.09400	0.42140	0.00470	0.76930	2307.5	9.9	2266.0	21.0	2346	8	2346.4	8.0	3.4	Single Age
12WPY43_92	100.40	1.08	0.94000	0.01100	0.10890	0.00150	0.56442	672.5	5.9	666.5	8.9	693	14	666.5	8.9	0.9	Single Age
12WPY43_93	680.00	1.14	0.85600	0.01500	0.09770	0.00190	0.87107	627.3	8.3	603.0	11.0	699	12	603.0	11.0	3.9	Single Age
12WPY43_94	208.00	1.15	1.83000	0.03700	0.17760	0.00370	0.63375	1055.0	13.0	1053.0	20.0	1043	24	1053.0	20.0	0.2	Single Age
12WPY43_95	1185.00	1.13	1.07800	0.01300	0.11450	0.00150	0.81257	743.2	6.0	700.1	8.8	862	8	700.1	8.8	5.8	Single Age
12WPY43_96	279.20	0.51	1.65900	0.01800	0.16610	0.00200	0.36336	992.8	6.9	991.0	11.0	1008	13	991.0	11.0	0.2	Single Age
12WPY43_97	1404.00	1.03	4.74000	0.10000	0.30570	0.00650	0.89297	1773.0	18.0	1718.0	32.0	1834	13	1834.0	13.0	6.3	Single Age
12WPY43_98	66.70	2.80	0.41400	0.01300	0.05060	0.00170	0.43641	351.9	9.5	318.0	10.0	565	58	318.0	10.0	9.6	Rim
12WPY43_98	574.00	10.60	1.47000	0.02400	0.14560	0.00270	0.81300	918.0	10.0	876.0	15.0	1009	14	876.0	15.0	4.6	Core
12WPY43_99	693.00	1.31	1.59800	0.02600	0.15990	0.00220	0.67625	971.0	10.0	956.0	12.0	1010	14	956.0	12.0	1.5	Single Age
12WPY43_100	203.00	2.10	0.85200	0.00870	0.10317	0.00096	0.56236	626.2	4.9	632.9	5.6	605	13	632.9	5.6	1.1	Single Age
12WPY43_101	325.00	1.48	0.83400	0.01300	0.09930	0.00130	0.48788	615.9	7.0	610.1	7.5	649	16	610.1	7.5	0.9	Single Age
12WPY43_102	425.00	1.65	0.84500	0.01900	0.10190	0.00240	0.91186	621.0	10.0	625.0	14.0	618	13	625.0	14.0	0.6	Single Age
12WPY43_103	305.00	4.76	1.00900	0.05200	0.11470	0.00540	0.63414	708.0	26.0	700.0	31.0	744	66	700.0	31.0	1.1	Rim
12WPY43_103	248.00	2.36	1.45600	0.01500	0.14990	0.00150	0.48728	912.0	6.1	900.5	8.4	948	11	900.5	8.4	1.3	Core
12WPY43_105	312.00	2.24	1.49600	0.01700	0.15430	0.00170	0.76555	928.5	6.7	924.9	9.4	942	8	924.9	9.4	0.4	Single Age
12WPY43_106	646.00	6.36	1.68900	0.02500	0.16770	0.00270	0.84081	1005.2	9.7	999.0	15.0	1017	13	999.0	15.0	0.6	Single Age
12WPY43_107	284.00	1.26	0.75700	0.01300	0.09320	0.00160	0.82230	571.8	7.7	574.3	9.5	582	12	574.3	9.5	0.4	Single Age
12WPY43_108	374.00	3.93	1.80700	0.03300	0.17230	0.00300	0.70062	1047.0	12.0	1024.0	16.0	1109	22	1024.0	16.0	2.2	Single Age
12WPY43_109	459.00	5.79	0.91200	0.01400	0.09410	0.00160	0.26824	657.9	7.6	579.8	9.7	929	43	DISC	DISC	11.9	Rim
12WPY43_109	240.20	1.31	1.38700	0.02100	0.14030	0.00260	0.75419	884.7	9.5	846.0	15.0	967	14	846.0	15.0	4.4	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY43_110	87.30	0.86	7.15000	0.24000	0.38300	0.01100	0.92708	2126.0	30.0	2086.0	52.0	2170	13	2170.0	13.0	3.9	Single Age
12WPY43_111	673.00	0.94	1.28500	0.02000	0.13270	0.00230	0.74184	838.7	8.9	803.0	13.0	947	9	803.0	13.0	4.3	Single Age
12WPY43_112	286.00	0.66	3.69700	0.08500	0.26390	0.00380	0.84677	1571.0	18.0	1512.0	20.0	1657	19	1657.0	19.0	8.8	Single Age
12WPY43_113	423.00	1.33	0.94900	0.01300	0.11000	0.00160	0.70800	678.7	6.7	672.8	9.3	713	12	672.8	9.3	0.9	Single Age
12WPY43_114	51.00	0.30	11.12000	0.25000	0.46070	0.00910	0.88466	2537.0	21.0	2441.0	40.0	2600	10	2599.9	9.6	6.1	Single Age
12WPY43_115	83.90	3.77	0.86700	0.00990	0.10296	0.00095	0.49340	633.7	5.4	631.7	5.6	642	13	631.7	5.6	0.3	Single Age
12WPY43_116	270.70	1.43	1.39300	0.02400	0.14650	0.00280	0.77763	886.0	10.0	881.0	16.0	916	15	881.0	16.0	0.6	Single Age
12WPY43_117	272.00	0.22	2.19100	0.02600	0.19610	0.00240	0.64397	1177.9	8.4	1154.0	13.0	1236	13	1154.0	13.0	2.0	Single Age
12WPY43_118	143.00	2.16	5.29000	0.13000	0.30870	0.00830	0.86432	1866.0	21.0	1733.0	41.0	2016	12	2016.0	12.0	14.0	Single Age
12WPY43_119	373.60	1.20	6.09000	0.10000	0.34400	0.00610	0.91895	1988.0	15.0	1905.0	29.0	2094	4	2094.4	4.4	9.0	Single Age
12WPY43_120	137.70	1.29	1.39600	0.03800	0.14540	0.00240	0.83423	890.0	15.0	875.0	13.0	928	16	875.0	13.0	1.7	Single Age
12WPY43_121	293.00	2.01	1.36900	0.02000	0.14470	0.00180	0.85940	875.1	8.4	871.0	10.0	899	10	871.0	10.0	0.5	Single Age
12WPY43_123	253.00	1.35	4.42200	0.08900	0.22360	0.00370	0.86614	1717.0	17.0	1300.0	20.0	2271	11	DISC	DISC	42.8	Single Age
12WPY43_125	127.20	0.66	1.78700	0.01600	0.17390	0.00140	0.58528	1040.5	5.8	1033.6	7.7	1056	10	1033.6	7.7	0.7	Single Age
12WPY43_126	304.00	2.41	0.75100	0.01000	0.09260	0.00110	0.73010	569.4	5.9	571.1	6.3	558	12	571.1	6.3	0.3	Single Age
12WPY43_127	106.70	0.74	11.55400	0.09600	0.47530	0.00440	0.84774	2568.4	7.8	2506.0	19.0	2615	7	2615.0	6.7	4.2	Single Age
12WPY43_128	266.00	0.92	1.74600	0.01900	0.17080	0.00230	0.67884	1025.3	6.9	1017.0	12.0	1043	11	1017.0	12.0	0.8	Single Age
12WPY43_129	358.00	0.42	1.38300	0.02600	0.13420	0.00220	0.86216	881.0	11.0	812.0	12.0	1034	9	812.0	12.0	7.8	Single Age
12WPY44_1	1670.00	7.58	0.76900	0.01100	0.09160	0.00170	0.73618	578.8	6.4	565.0	10.0	616	30	565.0	10.0	2.4	Rim
12WPY44_1	1304.00	14.76	11.23000	0.23000	0.45670	0.00900	0.89928	2541.0	19.0	2424.0	40.0	2631	14	2631.0	14.0	7.9	Core
12WPY44_2	1070.00	6.91	1.08200	0.01500	0.11970	0.00140	0.76776	745.4	7.1	728.5	8.3	793	20	728.5	8.3	2.3	Single Age
12WPY44_3	72.70	0.97	1.12100	0.02900	0.11830	0.00280	0.61281	761.0	14.0	720.0	16.0	866	49	720.0	16.0	5.4	Single Age
12WPY44_4	78.10	1.81	7.14000	0.55000	0.31600	0.01900	0.97318	2094.0	74.0	1760.0	96.0	2466	40	2466.0	40.0	28.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY44_5	1156.00	19.30	12.28000	0.20000	0.47980	0.00690	0.74247	2627.0	15.0	2526.0	30.0	2702	17	2702.0	17.0	6.5	Single Age
12WPY44_6	195.00	0.36	1.53800	0.03100	0.15110	0.00260	0.38055	944.0	12.0	907.0	14.0	1005	29	907.0	14.0	3.9	Single Age
12WPY44_7	124.20	0.67	1.07200	0.02400	0.12070	0.00230	0.42147	739.0	12.0	734.0	13.0	732	42	734.0	13.0	0.7	Single Age
12WPY44_8	181.00	0.41	1.82500	0.02500	0.17750	0.00230	0.64094	1054.0	9.0	1053.0	13.0	1064	22	1053.0	13.0	0.1	Single Age
12WPY44_10	137.00	0.92	1.01400	0.01600	0.11550	0.00160	0.63625	711.6	8.2	704.3	9.3	725	26	704.3	9.3	1.0	Single Age
12WPY44_11	405.00	9.70	6.48000	0.25000	0.37000	0.01100	0.92669	2054.0	32.0	2035.0	52.0	2068	26	2068.0	26.0	1.6	Single Age
12WPY44_12	104.00	2.59	0.82400	0.01600	0.09880	0.00460	0.22682	610.4	8.9	607.0	27.0	650	110	607.0	27.0	0.6	Rim
12WPY44_12	188.70	3.30	2.54200	0.04000	0.18410	0.00250	0.81377	1283.0	11.0	1089.0	14.0	1609	18	DISC	DISC	15.1	Core
12WPY44_13	633.00	4.43	4.98100	0.08200	0.30920	0.00660	0.83243	1815.0	14.0	1735.0	33.0	1880	21	1880.0	21.0	7.7	Single Age
12WPY44_15	138.00	2.08	0.99700	0.01400	0.11750	0.00180	0.53482	701.7	7.3	716.0	11.0	686	29	716.0	11.0	2.0	Single Age
12WPY44_16	138.10	1.03	1.06700	0.01800	0.12030	0.00110	0.17917	736.8	9.1	732.0	6.2	737	34	732.0	6.2	0.7	Single Age
12WPY44_17	163.60	1.02	1.15200	0.01800	0.12960	0.00200	0.54878	777.3	8.5	786.0	11.0	756	30	786.0	11.0	1.1	Single Age
12WPY44_18	302.00	2.10	1.21500	0.02300	0.13560	0.00330	0.79269	807.0	10.0	819.0	19.0	762	26	819.0	19.0	1.5	Single Age
12WPY44_19	379.00	2.73	4.11000	0.13000	0.22480	0.00550	0.94936	1654.0	24.0	1307.0	29.0	2133	22	DISC	DISC	38.7	Rim
12WPY44_19	126.70	1.03	9.84000	0.13000	0.44360	0.00820	0.62337	2420.0	12.0	2366.0	37.0	2452	25	2452.0	25.0	3.5	Core
12WPY44_20	231.00	0.62	1.72800	0.02000	0.17500	0.00160	0.54783	1018.4	7.6	1039.6	8.7	978	20	1039.6	8.7	2.1	Single Age
12WPY44_21	121.00	0.97	4.01900	0.08200	0.27220	0.00510	0.71860	1641.0	17.0	1551.0	26.0	1777	29	1777.0	29.0	12.7	Single Age
12WPY44_22	300.00	8.50	1.04500	0.01800	0.11920	0.00210	0.73604	726.9	8.9	726.0	12.0	716	27	726.0	12.0	0.1	Single Age
12WPY44_23	60.90	1.18	6.68000	0.14000	0.37820	0.00630	0.88067	2070.0	18.0	2067.0	30.0	2057	19	2057.0	19.0	0.5	Single Age
12WPY44_24	87.80	0.84	5.95000	0.13000	0.35070	0.00550	0.82694	1971.0	21.0	1938.0	26.0	2005	33	2005.0	33.0	3.3	Single Age
12WPY44_25	255.00	2.28	0.90100	0.03100	0.10520	0.00280	0.68413	651.0	16.0	645.0	16.0	691	51	645.0	16.0	0.9	Single Age
12WPY44_27	110.10	2.71	0.99000	0.01800	0.11520	0.00190	0.48799	698.2	9.1	703.0	11.0	703	39	703.0	11.0	0.7	Single Age
12WPY44_28	2490.00	38.00	0.85300	0.03600	0.10080	0.00390	0.35108	626.0	20.0	619.0	23.0	658	98	619.0	23.0	1.1	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY44_28	379.00	3.68	4.39000	0.13000	0.28420	0.00700	0.93692	1710.0	25.0	1611.0	35.0	1801	18	1801.0	18.0	10.5	Core
12WPY44_30	464.00	23.60	1.02900	0.03500	0.11670	0.00330	0.78943	718.0	18.0	711.0	19.0	735	50	711.0	19.0	1.0	Rim
12WPY44_30	269.70	1.60	3.10800	0.05200	0.25070	0.00400	0.87772	1434.0	13.0	1442.0	21.0	1426	16	1426.0	16.0	1.1	Core
12WPY44_31	86.50	0.71	5.43400	0.08500	0.30640	0.00490	0.62733	1889.0	13.0	1722.0	24.0	2071	24	2071.0	24.0	16.9	Single Age
12WPY44_32	227.00	0.78	1.64100	0.01900	0.16610	0.00160	0.59942	987.6	7.2	990.2	8.6	992	19	990.2	8.6	0.3	Single Age
12WPY44_33	902.00	3.76	0.75820	0.00720	0.09246	0.00094	0.75071	573.3	4.1	570.0	5.5	587	14	570.0	5.5	0.6	Single Age
12WPY44_34	353.00	3.00	3.83900	0.09600	0.25350	0.00700	0.92120	1599.0	20.0	1456.0	36.0	1799	26	1799.0	26.0	19.1	Single Age
12WPY44_35	575.00	1.82	1.40000	0.07400	0.14640	0.00700	0.97252	880.0	31.0	878.0	39.0	894	22	878.0	39.0	0.2	Single Age
12WPY44_36	90.70	2.26	1.58100	0.02500	0.16220	0.00160	0.45260	964.0	10.0	968.7	9.1	962	29	968.7	9.1	0.5	Single Age
12WPY44_37	550.00	1.09	7.11000	0.77000	0.31900	0.02900	0.99325	2084.0	95.0	1770.0	140.0	2447	36	2447.0	36.0	27.7	Single Age
12WPY44_38	537.00	0.61	0.84400	0.01900	0.10040	0.00230	0.69245	622.0	10.0	616.0	14.0	633	39	616.0	14.0	1.0	Single Age
12WPY44_39	150.70	1.34	1.25300	0.01700	0.13560	0.00140	0.60118	824.3	7.7	819.8	8.0	829	25	819.8	8.0	0.5	Single Age
12WPY44_40	212.00	2.31	1.12900	0.01600	0.12520	0.00150	0.42180	767.1	7.8	760.5	8.4	792	28	760.5	8.4	0.9	Single Age
12WPY44_41	211.60	1.07	1.61600	0.03600	0.16240	0.00470	0.76686	975.0	14.0	969.0	26.0	1004	36	969.0	26.0	0.6	Single Age
12WPY44_42	213.80	8.10	0.92300	0.02900	0.10910	0.00290	0.62973	664.0	15.0	667.0	17.0	662	61	667.0	17.0	0.5	Rim
12WPY44_42	233.00	1.01	1.58300	0.01800	0.15970	0.00130	0.60502	965.5	7.5	955.0	7.2	999	20	955.0	7.2	1.1	Core
12WPY44_43	169.00	0.53	0.90500	0.01400	0.10580	0.00120	0.34947	654.8	7.1	648.2	7.3	683	28	648.2	7.3	1.0	Single Age
12WPY44_44	98.50	2.35	0.89800	0.01500	0.10520	0.00110	0.35693	651.0	8.0	645.0	6.5	659	33	645.0	6.5	0.9	Single Age
12WPY44_45	978.00	4.50	7.03000	0.20000	0.33670	0.00750	0.97324	2114.0	26.0	1869.0	36.0	2368	15	2368.0	15.0	21.1	Single Age
12WPY44_46	54.30	1.69	1.19100	0.04000	0.12720	0.00370	0.03569	796.0	19.0	772.0	21.0	840	95	772.0	21.0	3.0	Rim
12WPY44_46	19.42	0.74	1.60800	0.05200	0.15860	0.00370	0.29020	977.0	20.0	948.0	21.0	1014	68	948.0	21.0	3.0	Core
12WPY44_47	308.00	12.11	0.84600	0.03000	0.10360	0.00420	0.71435	622.0	16.0	635.0	25.0	588	46	635.0	25.0	2.1	Rim
12WPY44_47	292.50	6.38	6.01200	0.06700	0.34490	0.00380	0.80939	1977.1	9.7	1910.0	18.0	2057	11	2057.0	11.0	7.1	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY44_48	1042.00	16.99	0.92700	0.04300	0.10700	0.00310	0.90116	665.0	23.0	655.0	18.0	706	51	655.0	18.0	1.5	Rim
12WPY44_48	374.10	5.51	1.60900	0.01700	0.16000	0.00140	0.57994	973.5	6.6	957.0	7.5	1020	18	957.0	7.5	1.7	Core
12WPY44_49	818.00	43.60	0.99600	0.01500	0.11600	0.00190	0.66978	701.3	7.6	709.0	11.0	694	25	709.0	11.0	1.1	Single Age
12WPY44_50	905.00	9.70	0.96800	0.01600	0.11180	0.00260	0.75820	687.2	8.2	683.0	15.0	711	33	683.0	15.0	0.6	Rim
12WPY44_50	86.80	0.75	1.50900	0.02500	0.15650	0.00220	0.35507	934.0	10.0	937.0	12.0	939	35	937.0	12.0	0.3	Core
12WPY44_51	168.50	0.69	2.17200	0.02700	0.18400	0.00190	0.57366	1171.5	8.6	1089.0	10.0	1337	20	1089.0	10.0	7.0	Single Age
12WPY44_52	167.40	2.12	1.26400	0.02100	0.13430	0.00160	0.53150	829.4	9.3	812.5	9.2	873	27	812.5	9.2	2.0	Single Age
12WPY44_53	255.10	1.59	1.55500	0.01900	0.15650	0.00170	0.63995	953.2	7.6	937.4	9.7	997	22	937.4	9.7	1.7	Single Age
12WPY44_54	121.00	0.78	5.76600	0.09800	0.34490	0.00700	0.80478	1941.0	14.0	1913.0	34.0	1984	20	1984.0	20.0	3.6	Single Age
12WPY44_55	207.60	1.27	1.61300	0.02500	0.16330	0.00250	0.57681	974.6	9.9	975.0	14.0	966	27	975.0	14.0	0.0	Single Age
12WPY44_56	108.10	0.51	5.17200	0.08000	0.32500	0.00650	0.68536	1847.0	13.0	1813.0	32.0	1866	29	1866.0	29.0	2.8	Single Age
12WPY44_57	204.40	1.38	1.60100	0.02700	0.16000	0.00240	0.76813	970.0	11.0	957.0	13.0	1015	23	957.0	13.0	1.3	Single Age
12WPY44_58	403.00	1.37	1.91300	0.01900	0.18300	0.00200	0.72058	1085.4	6.6	1083.0	11.0	1096	15	1083.0	11.0	0.2	Single Age
12WPY44_59	307.10	0.44	1.67500	0.01400	0.16610	0.00130	0.50057	1000.4	5.5	990.8	7.0	1019	15	990.8	7.0	1.0	Single Age
12WPY44_60	1160.00	36.90	0.94400	0.02500	0.10910	0.00220	0.80114	675.0	13.0	667.0	13.0	705	35	667.0	13.0	1.2	Rim
12WPY44_60	359.10	0.82	1.23700	0.01300	0.13480	0.00120	0.51979	817.3	5.7	815.3	6.8	827	21	815.3	6.8	0.2	Core
12WPY44_61	504.00	7.04	3.01400	0.04200	0.20620	0.00330	0.77436	1411.0	11.0	1209.0	17.0	1745	18	DISC	DISC	30.7	Single Age
12WPY44_62	331.00	1.12	7.61000	0.20000	0.33440	0.00840	0.79935	2190.0	23.0	1857.0	40.0	2493	24	2493.0	24.0	25.5	Single Age
12WPY44_63	126.00	1.61	0.89700	0.01400	0.10600	0.00150	0.49023	650.7	7.7	649.4	8.6	668	32	649.4	8.6	0.2	Single Age
12WPY44_65	68.20	5.70	1.12300	0.02600	0.12650	0.00170	0.34773	763.0	13.0	767.6	9.9	730	42	767.6	9.9	0.6	Single Age
12WPY44_66	91.60	0.40	5.11100	0.06500	0.32320	0.00400	0.70655	1839.0	10.0	1805.0	19.0	1885	18	1885.0	18.0	4.2	Single Age
12WPY44_67	82.10	0.60	5.95800	0.05900	0.35600	0.00380	0.59836	1969.0	8.6	1963.0	18.0	1982	15	1982.0	15.0	1.0	Single Age
12WPY44_68	435.00	2.95	1.75800	0.03500	0.17240	0.00340	0.81785	1029.0	13.0	1025.0	19.0	1031	25	1025.0	19.0	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY44_69	423.00	0.81	3.60000	0.04600	0.19290	0.00260	0.75720	1549.0	10.0	1137.0	14.0	2148	16	DISC	DISC	26.6	Single Age
12WPY44_70	591.30	44.20	0.83510	0.00870	0.09571	0.00080	0.67551	616.2	4.8	589.2	4.7	717	17	589.2	4.7	4.4	Single Age
12WPY44_71	386.00	4.10	0.94600	0.02200	0.10880	0.00180	0.83190	677.0	11.0	666.0	11.0	707	27	666.0	11.0	1.6	Single Age
12WPY44_72	317.70	5.81	1.58700	0.02100	0.15580	0.00220	0.69553	965.7	8.6	933.0	12.0	1021	23	933.0	12.0	3.4	Single Age
12WPY44_73	119.80	1.35	0.70800	0.01100	0.08640	0.00110	0.46543	543.3	6.8	534.1	6.3	560	31	534.1	6.3	1.7	Single Age
12WPY44_74	244.00	1.95	1.32500	0.03000	0.13690	0.00320	0.80759	860.0	14.0	829.0	18.0	952	26	829.0	18.0	3.6	Single Age
12WPY44_75	723.00	1.63	5.43300	0.04100	0.31290	0.00240	0.82690	1889.8	6.4	1755.0	12.0	2036	7	2036.1	7.4	13.8	Single Age
12WPY44_76	215.00	1.59	1.06200	0.01700	0.11820	0.00130	0.41738	736.2	8.2	720.0	7.5	773	33	720.0	7.5	2.2	Single Age
12WPY44_77	278.00	3.74	1.08500	0.02300	0.12310	0.00280	0.78546	747.0	11.0	748.0	16.0	732	31	748.0	16.0	0.1	Single Age
12WPY44_78	432.00	14.30	1.03300	0.01800	0.11620	0.00150	0.62191	721.6	8.6	708.6	8.5	742	28	708.6	8.5	1.8	Single Age
12WPY44_79	193.00	1.41	6.00800	0.05300	0.35230	0.00310	0.72336	1976.4	7.7	1947.0	15.0	2002	12	2002.0	12.0	2.7	Single Age
12WPY44_80	741.00	8.53	0.81800	0.01500	0.09490	0.00150	0.85994	606.1	8.2	585.4	8.5	691	23	585.4	8.5	3.4	Single Age
12WPY44_81	299.00	1.66	0.98400	0.01300	0.11330	0.00130	0.55503	696.0	6.9	692.1	7.6	701	27	692.1	7.6	0.6	Single Age
12WPY44_82	118.60	0.99	1.64800	0.02200	0.16100	0.00170	0.58761	988.4	8.3	961.9	9.3	1037	22	961.9	9.3	2.7	Single Age
12WPY44_83	41.60	0.88	1.75200	0.04800	0.16580	0.00240	0.36543	1025.0	17.0	989.0	13.0	1091	47	989.0	13.0	3.5	Single Age
12WPY44_85	222.00	1.13	6.26000	0.23000	0.33940	0.00980	0.91027	2007.0	31.0	1882.0	47.0	2133	24	2133.0	24.0	11.8	Single Age
12WPY44_86	64.90	2.05	1.56900	0.03800	0.15620	0.00250	0.51012	956.0	15.0	935.0	14.0	1020	41	935.0	14.0	2.2	Single Age
12WPY44_88	388.00	2.15	0.78200	0.01800	0.09580	0.00300	0.65271	586.0	10.0	590.0	18.0	554	55	590.0	18.0	0.7	Single Age
12WPY44_89	47.92	0.96	0.97000	0.02600	0.10840	0.00250	0.41826	687.0	13.0	663.0	15.0	746	56	663.0	15.0	3.5	Single Age
12WPY44_90	326.30	0.43	8.44000	0.27000	0.37200	0.00980	0.86690	2273.0	29.0	2037.0	46.0	2474	26	2474.0	26.0	17.7	Single Age
12WPY44_91	620.00	2.00	0.99000	0.01400	0.11380	0.00170	0.66295	698.7	7.2	694.9	9.6	707	25	694.9	9.6	0.5	Single Age
12WPY44_92	421.00	3.78	1.51900	0.01700	0.15470	0.00160	0.73589	938.7	6.9	927.1	8.8	952	15	927.1	8.8	1.2	Single Age
12WPY44_93	235.00	1.13	3.55000	0.03700	0.26060	0.00250	0.74192	1538.8	8.0	1493.0	13.0	1604	14	1604.0	14.0	6.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY44_94	212.00	1.10	1.66900	0.02500	0.16270	0.00270	0.61867	999.4	9.1	971.0	15.0	1049	27	971.0	15.0	2.8	Single Age
12WPY44_95	25.00	1.57	0.90600	0.03000	0.10160	0.00210	0.22758	661.0	17.0	624.0	12.0	777	79	624.0	12.0	5.6	Single Age
12WPY44_96	96.60	4.98	1.53100	0.01900	0.15300	0.00180	0.48004	942.2	7.7	917.4	9.9	980	25	917.4	9.9	2.6	Single Age
12WPY44_97	111.00	0.53	10.72000	0.10000	0.44270	0.00420	0.78948	2498.5	8.8	2363.0	19.0	2609	12	2609.0	12.0	9.4	Single Age
12WPY44_98	257.00	0.97	0.89400	0.01100	0.10500	0.00120	0.52877	648.4	6.0	643.8	7.1	657	26	643.8	7.1	0.7	Single Age
12WPY44_99	115.90	0.99	1.46200	0.02000	0.15190	0.00140	0.36575	914.4	8.1	911.5	7.7	920	29	911.5	7.7	0.3	Single Age
12WPY44_101	1210.00	9.66	0.87000	0.00880	0.10180	0.00140	0.77496	635.3	4.8	625.1	8.0	662	17	625.1	8.0	1.6	Single Age
12WPY44_103	148.50	1.66	1.75200	0.02500	0.17130	0.00240	0.70475	1027.1	9.1	1019.0	13.0	1046	23	1019.0	13.0	0.8	Single Age
12WPY44_104	237.00	0.79	10.62800	0.07900	0.44520	0.00410	0.69014	2490.8	6.9	2374.0	18.0	2587	13	2587.0	13.0	8.2	Single Age
12WPY44_105	236.00	3.44	1.57000	0.02500	0.16100	0.00300	0.63066	957.0	10.0	966.0	17.0	955	31	966.0	17.0	0.9	Single Age
12WPY44_107	163.80	1.40	1.13700	0.04100	0.12600	0.00510	0.63588	770.0	19.0	764.0	29.0	763	65	764.0	29.0	0.8	Single Age
12WPY44_108	307.50	2.38	1.23200	0.02200	0.13450	0.00200	0.74756	815.0	10.0	813.0	12.0	838	24	813.0	12.0	0.2	Single Age
12WPY44_109	352.00	4.00	6.10000	0.14000	0.29000	0.00690	0.81701	1989.0	20.0	1640.0	35.0	2370	22	DISC	DISC	30.8	Single Age
12WPY44_110	551.00	5.41	1.27000	0.11000	0.11730	0.00820	0.75516	823.0	52.0	714.0	47.0	1140	110	DISC	DISC	13.2	Rim
12WPY44_110	135.20	0.71	4.80000	0.17000	0.30600	0.01200	0.85733	1788.0	29.0	1720.0	58.0	1835	32	1835.0	32.0	6.3	Core
12WPY44_111	140.20	1.38	0.97300	0.02000	0.10860	0.00170	0.55029	689.0	10.0	664.0	10.0	789	43	664.0	10.0	3.6	Single Age
12WPY44_112	226.00	1.40	0.94600	0.01500	0.11240	0.00220	0.67322	675.7	8.0	686.0	13.0	626	35	686.0	13.0	1.5	Single Age
12WPY44_113	250.50	1.53	1.33100	0.02200	0.14010	0.00190	0.60484	860.0	9.8	845.0	11.0	906	24	845.0	11.0	1.7	Single Age
12WPY44_114	161.00	2.54	1.99000	0.03700	0.17840	0.00260	0.57892	1114.0	13.0	1058.0	14.0	1241	30	1058.0	14.0	5.0	Single Age
12WPY44_115	915.00	2.21	0.89800	0.01200	0.10260	0.00170	0.76568	650.3	6.2	630.0	10.0	731	23	630.0	10.0	3.1	Single Age
12WPY44_116	636.00	1.64	3.54200	0.09600	0.18830	0.00400	0.85862	1534.0	21.0	1112.0	21.0	2177	22	DISC	DISC	27.5	Single Age
12WPY44_117	113.30	1.17	1.83400	0.03000	0.18280	0.00360	0.70430	1057.0	11.0	1082.0	19.0	1005	31	1082.0	19.0	2.4	Single Age
12WPY44_118	119.10	1.23	1.54700	0.05300	0.14820	0.00470	0.88582	945.0	21.0	890.0	26.0	1084	29	890.0	26.0	5.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY44_119	231.00	0.78	1.73000	0.04000	0.17130	0.00370	0.80587	1019.0	15.0	1019.0	20.0	1019	22	1019.0	20.0	0.0	Single Age
12WPY44_120	153.90	0.91	4.47500	0.06100	0.28810	0.00420	0.64550	1725.0	11.0	1632.0	21.0	1834	19	1834.0	19.0	11.0	Single Age
12WPY44_123	134.40	0.40	1.93200	0.03000	0.18380	0.00310	0.73046	1091.0	10.0	1087.0	17.0	1086	23	1087.0	17.0	0.4	Single Age
12WPY44_124	183.00	1.50	1.61000	0.02500	0.16040	0.00230	0.68141	973.2	9.8	959.0	13.0	992	26	959.0	13.0	1.5	Single Age
12WPY45_1	302.00	1.26	12.51000	0.29000	0.46900	0.00800	0.85345	2639.0	23.0	2477.0	35.0	2746	24	2746.0	24.0	9.8	Single Age
12WPY45_2	151.80	1.08	4.21100	0.06200	0.27340	0.00420	0.68030	1675.0	12.0	1558.0	21.0	1832	16	1832.0	16.0	15.0	Single Age
12WPY45_3	158.90	0.83	6.06000	0.07100	0.34730	0.00420	0.67890	1983.0	10.0	1921.0	20.0	2059	12	2059.0	12.0	6.7	Single Age
12WPY45_4	266.00	1.07	23.47000	0.23000	0.60950	0.00810	0.31867	3246.3	9.5	3075.0	29.0	3359	10	3359.1	9.8	8.5	Single Age
12WPY45_5	375.00	12.10	0.82200	0.02500	0.09350	0.00310	0.76988	608.0	14.0	576.0	18.0	719	32	576.0	18.0	5.3	Rim
12WPY45_5	347.00	1.57	1.19200	0.04100	0.12520	0.00420	0.84823	796.0	19.0	760.0	24.0	859	19	760.0	24.0	4.5	Core
12WPY45_6	310.00	0.85	5.30700	0.06200	0.33450	0.00410	0.72693	1870.8	9.8	1860.0	20.0	1882	12	1882.0	12.0	1.2	Single Age
12WPY45_7	332.80	1.30	1.72500	0.02100	0.17020	0.00230	0.60964	1017.2	7.7	1013.0	13.0	1027	15	1013.0	13.0	0.4	Single Age
12WPY45_8	844.00	1.21	0.67600	0.01100	0.08240	0.00160	0.82483	524.0	6.7	510.6	9.7	586	19	510.6	9.7	2.6	Single Age
12WPY45_10	241.00	0.98	9.37000	0.19000	0.43810	0.00920	0.82311	2374.0	18.0	2341.0	41.0	2403	14	2403.0	14.0	2.6	Single Age
12WPY45_11	116.10	0.94	1.53000	0.01900	0.15750	0.00210	0.73797	941.8	7.8	943.0	11.0	964	12	943.0	11.0	0.1	Single Age
12WPY45_12	127.90	3.01	0.94800	0.01200	0.10900	0.00130	0.61075	676.7	6.3	666.6	7.8	710	15	666.6	7.8	1.5	Single Age
12WPY45_13	89.50	1.58	0.84520	0.00880	0.10083	0.00084	0.52063	621.8	4.8	619.2	4.9	639	12	619.2	4.9	0.4	Single Age
12WPY45_14	469.40	16.61	0.79020	0.00830	0.09489	0.00083	0.66728	591.1	4.7	584.4	4.9	628	12	584.4	4.9	1.1	Single Age
12WPY45_15	400.00	1.32	10.04000	0.15000	0.39870	0.00530	0.79702	2441.0	14.0	2162.0	24.0	2669	9	2669.4	8.6	19.0	Single Age
12WPY45_17	352.70	0.45	2.81800	0.02600	0.23030	0.00230	0.62901	1360.0	6.8	1336.0	12.0	1397	9	1396.7	9.4	4.3	Single Age
12WPY45_18	80.60	1.11	6.36400	0.06300	0.35970	0.00450	0.70824	2026.5	8.7	1980.0	21.0	2075	8	2075.4	8.2	4.6	Single Age
12WPY45_19	161.60	1.28	0.84990	0.00860	0.10075	0.00088	0.64615	624.4	4.7	618.8	5.2	650	11	618.8	5.2	0.9	Single Age
12WPY45_20	191.60	1.04	1.20800	0.01600	0.13000	0.00140	0.65616	804.0	7.2	787.5	8.1	857	10	787.5	8.1	2.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY45_21	290.00	1.20	0.73400	0.01400	0.08950	0.00160	0.63035	558.5	8.2	552.6	9.6	585	17	552.6	9.6	1.1	Single Age
12WPY45_22	62.30	0.76	3.15400	0.04500	0.25500	0.00350	0.50106	1445.0	11.0	1464.0	18.0	1427	14	1427.0	14.0	2.6	Single Age
12WPY45_23	230.00	1.11	1.17700	0.01200	0.13010	0.00130	0.08850	789.6	5.6	788.2	7.2	796	10	788.2	7.2	0.2	Single Age
12WPY45_24	105.00	0.52	0.98380	0.00980	0.11390	0.00120	0.97877	695.4	5.0	695.5	6.7	705	13	695.5	6.7	0.0	Single Age
12WPY45_25	38.43	0.37	1.70300	0.02100	0.16960	0.00230	0.52818	1009.0	8.1	1010.0	12.0	999	15	1010.0	12.0	0.1	Single Age
12WPY45_26	62.20	4.27	1.03400	0.01800	0.11890	0.00160	0.67689	720.4	9.1	724.3	8.9	695	11	724.3	8.9	0.5	Single Age
12WPY45_27	681.00	1.39	4.29700	0.05600	0.23690	0.00270	0.72001	1692.0	11.0	1370.0	14.0	2096	10	DISC	DISC	34.6	Single Age
12WPY45_28	298.00	3.25	9.94000	0.16000	0.41330	0.00710	0.80755	2428.0	15.0	2229.0	33.0	2598	11	2598.0	11.0	14.2	Single Age
12WPY45_29	1250.00	159.00	0.88900	0.01300	0.10230	0.00180	0.78430	645.4	7.0	628.0	11.0	722	10	628.0	11.0	2.7	Rim
12WPY45_29	290.00	5.15	1.25800	0.02600	0.13550	0.00270	0.73995	826.0	12.0	819.0	15.0	846	16	819.0	15.0	0.8	Core
12WPY45_30	44.00	1.30	1.73500	0.02300	0.17010	0.00200	0.46403	1020.8	8.8	1013.0	11.0	1058	17	1013.0	11.0	0.8	Single Age
12WPY45_31	191.00	6.20	0.95400	0.01400	0.11100	0.00150	0.59046	680.9	7.5	678.3	8.9	702	18	678.3	8.9	0.4	Single Age
12WPY45_32	104.30	0.64	1.80100	0.01700	0.17240	0.00220	0.43053	1047.3	6.3	1025.0	12.0	1094	15	1025.0	12.0	2.1	Single Age
12WPY45_33	345.00	0.51	7.72000	0.27000	0.33500	0.01000	0.96718	2193.0	32.0	1860.0	51.0	2525	12	2525.0	12.0	26.3	Single Age
12WPY45_35	397.00	0.69	0.72900	0.01100	0.08950	0.00140	0.83231	555.5	6.3	552.6	8.4	576	11	552.6	8.4	0.5	Single Age
12WPY45_36	574.00	0.45	0.77800	0.01300	0.09420	0.00160	0.91059	583.7	7.5	580.2	9.6	611	9	580.2	9.6	0.6	Single Age
12WPY45_37	249.00	0.57	1.60000	0.02200	0.15590	0.00230	0.72977	971.0	8.6	934.0	13.0	1044	12	934.0	13.0	3.8	Single Age
12WPY45_38	76.10	1.07	1.59400	0.04800	0.15770	0.00300	0.60799	967.0	19.0	944.0	17.0	1030	28	944.0	17.0	2.4	Single Age
12WPY45_39	71.40	0.92	11.34300	0.09300	0.46180	0.00410	0.74019	2551.2	7.6	2447.0	18.0	2642	6	2642.1	6.1	7.4	Single Age
12WPY45_40	252.00	1.89	1.15800	0.01500	0.12930	0.00210	0.78365	781.4	7.0	784.0	12.0	776	15	784.0	12.0	0.3	Single Age
12WPY45_41	87.20	0.90	1.56400	0.04800	0.15910	0.00440	0.72595	955.0	19.0	951.0	24.0	983	31	951.0	24.0	0.4	Single Age
12WPY45_42	229.50	6.24	0.89100	0.01700	0.10530	0.00200	0.71944	646.2	9.0	645.0	12.0	662	23	645.0	12.0	0.2	Single Age
12WPY45_43	198.00	1.71	6.02800	0.08700	0.35470	0.00530	0.79646	1981.0	12.0	1956.0	25.0	2014	10	2014.2	9.7	2.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY45_45	273.70	1.01	1.52100	0.01900	0.15360	0.00140	0.68257	938.6	7.7	922.8	8.3	969	10	922.8	8.3	1.7	Single Age
12WPY45_46	227.00	0.73	1.64200	0.02000	0.16550	0.00220	0.77477	985.8	7.7	987.0	12.0	988	19	987.0	12.0	0.1	Single Age
12WPY45_47	950.00	1.76	0.99300	0.03000	0.11050	0.00340	0.89687	700.0	16.0	676.0	20.0	802	21	676.0	20.0	3.4	Single Age
12WPY45_49	148.30	1.23	1.60200	0.01500	0.16040	0.00130	0.39334	971.3	5.7	958.9	7.3	988	11	958.9	7.3	1.3	Single Age
12WPY45_50	2070.00	8.09	0.72600	0.01500	0.08500	0.00220	0.71908	553.8	9.1	526.0	13.0	664	26	526.0	13.0	5.0	Rim
12WPY45_50	367.00	25.40	1.01800	0.01800	0.11510	0.00160	0.64534	712.4	9.0	702.2	9.3	758	26	702.2	9.3	1.4	Core
12WPY45_51	162.60	0.66	6.94000	0.12000	0.32400	0.00520	0.87718	2102.0	16.0	1809.0	25.0	2395	11	2395.0	11.0	24.5	Single Age
12WPY45_52	514.00	1.12	10.25000	0.17000	0.43300	0.00510	0.72686	2456.0	16.0	2319.0	23.0	2569	14	2569.0	14.0	9.7	Single Age
12WPY45_53	258.00	23.80	9.79000	0.11000	0.39970	0.00390	0.69069	2414.0	10.0	2168.0	18.0	2615	8	2615.4	7.6	17.1	Single Age
12WPY45_54	339.00	2.87	7.52000	0.12000	0.38580	0.00600	0.74994	2174.0	15.0	2108.0	29.0	2257	12	2257.0	12.0	6.6	Single Age
12WPY45_55	336.50	3.28	0.87900	0.01200	0.10160	0.00140	0.53049	641.1	6.5	623.5	8.3	703	21	623.5	8.3	2.7	Single Age
12WPY45_56	632.00	0.69	1.02000	0.01500	0.11300	0.00180	0.81501	713.6	7.6	690.0	11.0	800	15	690.0	11.0	3.3	Single Age
12WPY45_57	119.20	1.71	1.63300	0.01800	0.16650	0.00160	0.50308	982.6	7.0	993.8	8.7	974	11	993.8	8.7	1.1	Single Age
12WPY45_58	1142.00	14.60	0.90200	0.01300	0.10180	0.00140	0.68593	652.8	6.6	624.9	8.2	760	19	624.9	8.2	4.3	Single Age
12WPY45_59	46.60	1.07	0.86900	0.01400	0.10180	0.00130	0.25788	634.5	7.4	625.0	7.4	662	21	625.0	7.4	1.5	Single Age
12WPY45_60	308.00	0.95	2.03500	0.02400	0.18790	0.00240	0.84634	1127.8	8.3	1110.0	13.0	1162	9	1110.0	13.0	1.6	Single Age
12WPY45_61	285.80	1.39	6.60200	0.08700	0.31860	0.00410	0.71914	2061.0	12.0	1782.0	20.0	2342	10	2341.7	9.9	23.9	Single Age
12WPY45_62	164.10	0.94	1.74900	0.01300	0.17160	0.00140	0.38544	1027.2	5.0	1020.8	7.6	1043	9	1020.8	7.6	0.6	Single Age
12WPY45_63	247.50	0.96	1.69100	0.03000	0.16770	0.00330	0.74584	1005.0	11.0	999.0	18.0	1010	19	999.0	18.0	0.6	Single Age
12WPY45_64	173.20	0.96	1.75700	0.02200	0.16930	0.00240	0.58005	1030.7	8.5	1008.0	13.0	1082	17	1008.0	13.0	2.2	Single Age
12WPY45_65	45.65	1.20	1.14500	0.02300	0.12970	0.00220	0.37218	774.0	11.0	786.0	13.0	779	31	786.0	13.0	1.6	Single Age
12WPY45_66	289.00	1.46	1.52800	0.01900	0.15510	0.00180	0.78382	941.1	7.5	929.0	10.0	976	9	929.0	10.0	1.3	Single Age
12WPY45_67	417.00	119.20	0.76800	0.01900	0.09550	0.00300	0.73500	578.0	11.0	587.0	18.0	578	29	587.0	18.0	1.6	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY45_67	244.20	2.02	1.25600	0.04400	0.12950	0.00410	0.84759	825.0	20.0	785.0	23.0	903	34	785.0	23.0	4.8	Core
12WPY45_68	123.10	1.16	5.12200	0.06700	0.32630	0.00330	0.80856	1839.0	11.0	1820.0	16.0	1858	9	1858.1	8.6	2.1	Single Age
12WPY45_69	185.50	1.49	1.71900	0.01800	0.17030	0.00190	0.45178	1015.1	6.8	1015.0	10.0	1015	15	1015.0	10.0	0.0	Single Age
12WPY45_70	280.00	0.32	0.77900	0.01300	0.09590	0.00180	0.81386	584.7	7.6	590.0	10.0	590	14	590.0	10.0	0.9	Single Age
12WPY45_71	222.50	1.15	11.09000	0.21000	0.45010	0.00940	0.73223	2532.0	17.0	2394.0	42.0	2628	14	2628.0	14.0	8.9	Single Age
12WPY45_72	212.00	2.48	0.85990	0.00880	0.10320	0.00120	0.41901	629.8	4.8	633.2	7.0	620	20	633.2	7.0	0.5	Single Age
12WPY45_73	236.00	1.77	0.94500	0.01200	0.11150	0.00140	0.67088	675.2	6.4	681.1	8.2	673	15	681.1	8.2	0.9	Single Age
12WPY45_74	86.10	0.75	0.78430	0.00900	0.09551	0.00085	0.26813	587.8	5.1	588.0	5.0	596	15	588.0	5.0	0.0	Single Age
12WPY45_75	79.10	0.45	5.20500	0.06300	0.33080	0.00350	0.61711	1853.0	10.0	1842.0	17.0	1873	10	1873.0	10.0	1.7	Single Age
12WPY45_76	216.00	0.88	1.32700	0.04000	0.13970	0.00360	0.86666	856.0	17.0	843.0	21.0	889	19	843.0	21.0	1.5	Single Age
12WPY45_78	446.00	0.53	2.48200	0.03300	0.18040	0.00210	0.74059	1268.0	10.0	1069.0	11.0	1616	12	DISC	DISC	15.7	Single Age
12WPY45_79	215.00	0.32	0.82830	0.00980	0.10030	0.00120	0.53622	612.4	5.5	616.2	7.2	607	15	616.2	7.2	0.6	Single Age
12WPY45_80	211.00	0.35	9.23000	0.30000	0.38900	0.01100	0.93477	2359.0	29.0	2113.0	50.0	2573	12	2573.0	12.0	17.9	Single Age
12WPY45_81	714.00	1.16	5.29900	0.06300	0.32100	0.00660	0.42014	1870.0	9.8	1794.0	32.0	1960	21	1960.0	21.0	8.5	Single Age
12WPY45_82	191.70	0.52	1.67500	0.02400	0.16470	0.00270	0.70056	998.6	9.3	983.0	15.0	1031	15	983.0	15.0	1.6	Single Age
12WPY45_83	229.00	46.80	0.67600	0.04800	0.08190	0.00810	0.94398	524.0	29.0	507.0	48.0	582	24	507.0	48.0	3.2	Rim
12WPY45_83	528.00	1.11	1.57100	0.02300	0.15380	0.00230	0.85151	958.2	9.0	922.0	13.0	1055	8	922.0	13.0	3.8	Core
12WPY45_86	245.00	0.49	0.85510	0.00860	0.10085	0.00091	0.56567	627.3	4.7	619.4	5.3	660	12	619.4	5.3	1.3	Single Age
12WPY45_87	49.70	1.38	6.45000	0.13000	0.37110	0.00700	0.91401	2039.0	18.0	2033.0	33.0	2042	9	2042.2	8.8	0.5	Single Age
12WPY45_88	207.90	0.68	1.83200	0.02400	0.17680	0.00240	0.63264	1056.6	8.7	1050.0	13.0	1072	15	1050.0	13.0	0.6	Single Age
12WPY45_89	272.60	1.42	0.95200	0.06800	0.09910	0.00170	0.71340	664.0	27.0	609.0	9.7	900	120	609.0	9.7	8.3	Rim
12WPY45_89	335.00	3.88	0.99200	0.02400	0.10930	0.00160	0.58204	699.0	12.0	668.6	9.3	804	30	668.6	9.3	4.3	Core
12WPY45_90	1920.00	3.53	0.97600	0.03000	0.10180	0.00320	0.65954	691.0	15.0	625.0	19.0	952	33	625.0	19.0	9.6	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY45_90	270.00	0.66	1.61500	0.02800	0.16220	0.00370	0.70478	976.0	11.0	969.0	21.0	980	18	969.0	21.0	0.7	Core
12WPY45_91	317.00	3.69	0.92800	0.02000	0.10700	0.00280	0.71654	667.0	10.0	655.0	16.0	699	32	655.0	16.0	1.8	Single Age
12WPY45_92	38.90	2.19	6.60000	0.11000	0.38100	0.00730	0.77368	2062.0	15.0	2080.0	34.0	2042	20	2042.0	20.0	1.9	Single Age
12WPY45_93	281.00	3.00	6.68000	0.15000	0.36420	0.00770	0.86902	2067.0	20.0	2001.0	36.0	2123	9	2122.9	9.3	5.7	Single Age
12WPY45_94	243.10	0.81	0.84580	0.00660	0.10130	0.00100	0.43136	622.2	3.6	622.2	6.0	618	12	622.2	6.0	0.0	Single Age
12WPY45_95	60.70	0.98	1.77400	0.04300	0.17420	0.00310	0.50649	1029.0	12.0	1035.0	17.0	1031	24	1035.0	17.0	0.6	Single Age
12WPY45_96	1860.00	24.90	0.80100	0.01800	0.09280	0.00360	0.72896	597.0	10.0	572.0	21.0	724	38	572.0	21.0	4.2	Rim
12WPY45_96	272.00	0.67	1.67800	0.03300	0.16360	0.00290	0.62368	999.0	13.0	977.0	16.0	1072	26	977.0	16.0	2.2	Core
12WPY45_97	326.40	1.92	0.87900	0.01300	0.10350	0.00190	0.50920	640.1	6.8	635.0	11.0	654	18	635.0	11.0	0.8	Single Age
12WPY45_98	52.60	1.04	5.37700	0.07400	0.34090	0.00500	0.67769	1880.0	12.0	1895.0	25.0	1863	17	1863.0	17.0	1.7	Single Age
12WPY45_99	93.60	1.02	6.22400	0.06500	0.35370	0.00400	0.70380	2008.4	9.4	1952.0	19.0	2063	8	2063.4	8.2	5.4	Single Age
12WPY45_100	380.00	1.43	1.40700	0.02000	0.14840	0.00240	0.65104	891.4	8.6	892.0	14.0	905	18	892.0	14.0	0.1	Single Age
12WPY45_101	440.00	2.67	0.98300	0.03500	0.11200	0.00310	0.87771	695.0	18.0	685.0	18.0	724	26	685.0	18.0	1.4	Single Age
12WPY45_102	397.00	0.28	1.55400	0.01900	0.15440	0.00180	0.64113	951.6	7.5	926.0	10.0	1017	14	926.0	10.0	2.7	Single Age
12WPY45_103	159.00	1.01	1.52400	0.02100	0.15720	0.00210	0.70190	939.7	8.6	941.0	12.0	948	21	941.0	12.0	0.1	Single Age
12WPY45_104	225.30	1.45	0.82300	0.01900	0.09780	0.00280	0.55596	610.0	10.0	601.0	16.0	666	32	601.0	16.0	1.5	Rim
12WPY45_104	223.00	1.93	1.55500	0.02600	0.15960	0.00280	0.57966	952.0	10.0	955.0	16.0	950	21	955.0	16.0	0.3	Core
12WPY45_105	111.90	0.76	1.71600	0.01500	0.16830	0.00170	0.50897	1014.3	5.6	1002.6	9.2	1047	11	1002.6	9.2	1.2	Single Age
12WPY45_106	285.00	0.89	1.66700	0.02200	0.15980	0.00170	0.66105	995.5	8.4	955.5	9.5	1068	14	955.5	9.5	4.0	Single Age
12WPY45_107	195.50	0.96	1.60800	0.02200	0.16110	0.00210	0.63997	972.7	8.4	965.0	12.0	997	15	965.0	12.0	0.8	Single Age
12WPY45_108	256.00	0.70	1.77800	0.03400	0.17380	0.00430	0.36687	1037.0	13.0	1033.0	24.0	1022	18	1033.0	24.0	0.4	Single Age
12WPY45_109	178.00	1.01	1.55700	0.02500	0.15450	0.00260	0.73564	952.0	10.0	926.0	15.0	1007	14	926.0	15.0	2.7	Single Age
12WPY45_110	297.00	1.14	0.99700	0.01500	0.11200	0.00210	0.74379	701.8	7.4	684.0	12.0	757	16	684.0	12.0	2.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY45_111	281.00	1.81	5.77900	0.06300	0.32290	0.00440	0.56498	1942.9	9.4	1804.0	22.0	2090	12	2090.0	12.0	13.7	Single Age
12WPY45_112	119.90	1.66	1.58900	0.02800	0.15970	0.00200	0.56944	965.0	11.0	955.0	11.0	980	18	955.0	11.0	1.0	Single Age
12WPY45_113	188.00	0.76	1.79800	0.02800	0.17590	0.00240	0.82033	1044.0	10.0	1044.0	13.0	1047	10	1044.0	13.0	0.0	Single Age
12WPY45_114	64.20	0.55	3.12600	0.03000	0.24730	0.00200	0.50010	1438.7	7.3	1425.0	11.0	1453	10	1452.6	9.9	1.9	Single Age
12WPY45_116	86.90	0.61	1.20600	0.01400	0.13020	0.00130	0.56734	802.9	6.3	788.8	7.7	837	12	788.8	7.7	1.8	Single Age
12WPY45_117	329.00	1.20	1.77900	0.01900	0.17390	0.00200	0.70749	1037.5	7.1	1034.0	11.0	1068	12	1034.0	11.0	0.3	Single Age
12WPY45_118	145.80	3.56	0.87400	0.01200	0.10440	0.00140	0.22629	637.3	6.5	640.1	8.0	625	14	640.1	8.0	0.4	Single Age
12WPY45_119	154.80	1.41	0.91200	0.01100	0.10830	0.00110	0.59761	658.6	6.2	662.7	6.3	658	14	662.7	6.3	0.6	Single Age
12WPY45_120	236.00	1.57	1.76400	0.04000	0.17190	0.00380	0.74760	1032.0	15.0	1022.0	21.0	1058	18	1022.0	21.0	1.0	Single Age
12WPY45_121	72.70	0.49	9.98000	0.15000	0.40610	0.00540	0.77892	2432.0	14.0	2196.0	25.0	2623	10	2622.5	9.7	16.3	Single Age
12WPY45_122	466.00	4.30	0.78000	0.02100	0.09430	0.00210	0.60392	585.0	12.0	581.0	13.0	630	19	581.0	13.0	0.7	Rim
12WPY45_122	515.00	1.24	1.01000	0.02000	0.11340	0.00230	0.91420	709.0	10.0	692.0	13.0	775	16	692.0	13.0	2.4	Core
12WPY45_123	374.00	2.45	1.62600	0.03100	0.16110	0.00280	0.76928	980.0	12.0	963.0	15.0	1024	18	963.0	15.0	1.7	Single Age
12WPY45_124	642.00	0.98	0.69100	0.01300	0.08220	0.00150	0.89507	532.7	7.9	508.9	8.8	643	15	508.9	8.8	4.5	Single Age
12WPY46_1	233.50	1.12	1.29000	0.01600	0.13970	0.00180	0.52471	841.7	7.4	843.0	10.0	824	27	843.0	10.0	0.2	Single Age
12WPY46_2	455.00	5.52	10.32000	0.28000	0.44400	0.01300	0.74280	2470.0	27.0	2375.0	59.0	2538	35	2538.0	35.0	6.4	Single Age
12WPY46_3	60.00	1.81	0.95100	0.01700	0.11110	0.00130	0.36507	677.8	8.7	680.1	7.5	670	35	680.1	7.5	0.3	Single Age
12WPY46_4	217.00	2.58	1.81500	0.04100	0.17710	0.00420	0.69994	1050.0	15.0	1051.0	23.0	1047	31	1051.0	23.0	0.1	Single Age
12WPY46_5	258.00	3.67	1.20000	0.02800	0.13250	0.00260	0.76955	801.0	13.0	802.0	15.0	792	29	802.0	15.0	0.1	Single Age
12WPY46_6	73.60	1.09	0.86400	0.01700	0.10280	0.00130	0.46189	632.4	9.3	630.7	7.8	640	41	630.7	7.8	0.3	Single Age
12WPY46_7	172.00	14.20	0.85100	0.03800	0.10240	0.00430	0.45845	628.0	20.0	634.0	23.0	580	100	634.0	23.0	1.0	Rim
12WPY46_7	337.00	1.41	6.89000	0.18000	0.39050	0.00950	0.90245	2095.0	24.0	2124.0	44.0	2068	18	2068.0	18.0	2.7	Core
12WPY46_8	131.90	0.97	1.65900	0.02400	0.16630	0.00240	0.68661	993.4	9.2	992.0	13.0	992	23	992.0	13.0	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY46_9	53.30	0.35	4.98100	0.09700	0.31000	0.00550	0.70976	1813.0	17.0	1740.0	27.0	1886	25	1886.0	25.0	7.7	Single Age
12WPY46_10	125.00	1.28	1.98100	0.04600	0.19610	0.00480	0.68391	1109.0	15.0	1157.0	27.0	1017	38	1157.0	27.0	4.3	Single Age
12WPY46_11	478.00	0.65	0.82900	0.01000	0.09950	0.00160	0.58247	612.7	5.6	611.1	9.5	626	25	611.1	9.5	0.3	Single Age
12WPY46_12	103.00	0.97	0.76400	0.01400	0.09450	0.00160	0.55780	577.3	7.6	581.8	9.7	584	34	581.8	9.7	0.8	Single Age
12WPY46_13	31.70	1.51	1.22900	0.06400	0.12690	0.00610	0.62434	815.0	28.0	782.0	31.0	883	90	782.0	31.0	4.0	Single Age
12WPY46_14	238.00	10.80	9.97000	0.18000	0.43140	0.00480	0.83554	2436.0	17.0	2315.0	21.0	2529	17	2529.0	17.0	8.5	Single Age
12WPY46_15	267.70	1.36	1.25600	0.02700	0.13590	0.00320	0.75650	827.0	12.0	821.0	18.0	841	33	821.0	18.0	0.7	Single Age
12WPY46_16	151.00	1.22	1.15300	0.03600	0.12590	0.00300	0.14480	778.0	17.0	764.0	17.0	797	52	764.0	17.0	1.8	Rim
12WPY46_16	126.80	0.53	1.44300	0.02400	0.14880	0.00230	0.44626	906.5	9.9	894.0	13.0	926	36	894.0	13.0	1.4	Core
12WPY46_17	327.00	2.11	1.70100	0.02200	0.16890	0.00200	0.72048	1008.5	8.2	1006.0	11.0	1016	20	1006.0	11.0	0.2	Single Age
12WPY46_18	43.30	2.78	11.65000	0.20000	0.46030	0.00740	0.77656	2575.0	16.0	2440.0	33.0	2680	20	2680.0	20.0	9.0	Single Age
12WPY46_19	14.00	0.52	0.32400	0.05800	0.03480	0.00450	0.69477	282.0	45.0	221.0	28.0	880	270	DISC	DISC	21.6	Rim
12WPY46_19	25.44	1.27	0.87700	0.03500	0.10700	0.00300	0.25935	638.0	19.0	655.0	18.0	540	100	655.0	18.0	2.7	Core
12WPY46_20	106.00	2.01	1.13900	0.02400	0.12540	0.00250	0.47872	771.0	11.0	761.0	14.0	803	46	761.0	14.0	1.3	Single Age
12WPY46_21	28.40	29.70	0.89100	0.03000	0.10300	0.00270	0.06426	645.0	16.0	632.0	16.0	640	91	632.0	16.0	2.0	Rim
12WPY46_21	23.70	4.04	1.44000	0.14000	0.15890	0.00750	0.13106	901.0	58.0	950.0	42.0	770	220	950.0	42.0	5.4	Core
12WPY46_22	710.00	1.38	1.24400	0.06000	0.13360	0.00700	0.68144	828.0	31.0	808.0	40.0	844	93	808.0	40.0	2.4	Rim
12WPY46_22	200.10	0.85	1.65400	0.03100	0.16770	0.00390	0.74173	990.0	12.0	999.0	21.0	973	27	999.0	21.0	0.9	Core
12WPY46_23	104.00	0.88	4.37400	0.09400	0.28670	0.00640	0.75331	1709.0	18.0	1623.0	32.0	1819	26	1819.0	26.0	10.8	Single Age
12WPY46_24	241.00	1.29	1.84700	0.03000	0.18130	0.00310	0.79148	1063.0	11.0	1074.0	17.0	1038	22	1074.0	17.0	1.0	Single Age
12WPY46_25	118.80	0.52	1.68800	0.02900	0.17100	0.00310	0.66930	1003.0	11.0	1020.0	16.0	978	30	1020.0	16.0	1.7	Single Age
12WPY46_26	298.00	4.21	3.97000	0.16000	0.25370	0.00880	0.94239	1622.0	33.0	1455.0	45.0	1857	23	1857.0	23.0	21.6	Single Age
12WPY46_27	290.60	46.60	0.89800	0.02400	0.10490	0.00310	0.58505	650.0	13.0	643.0	18.0	653	56	643.0	18.0	1.1	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY46_27	400.00	0.95	1.34900	0.05500	0.13740	0.00620	0.73330	865.0	24.0	829.0	35.0	949	61	829.0	35.0	4.2	Core
12WPY46_28	532.00	6.89	2.63000	0.10000	0.18320	0.00560	0.84165	1317.0	29.0	1083.0	30.0	1683	37	DISC	DISC	17.8	Single Age
12WPY46_29	253.00	0.85	1.68500	0.03000	0.16790	0.00320	0.74716	1002.0	12.0	1000.0	17.0	1012	26	1000.0	17.0	0.2	Single Age
12WPY46_30	303.00	2.25	5.12000	0.11000	0.31680	0.00760	0.73221	1837.0	17.0	1777.0	36.0	1903	28	1903.0	28.0	6.6	Single Age
12WPY46_31	392.00	0.89	0.87400	0.01100	0.10280	0.00150	0.59892	638.3	6.2	630.4	8.8	647	30	630.4	8.8	1.2	Single Age
12WPY46_32	52.20	1.76	14.66000	0.22000	0.51640	0.00790	0.69331	2793.0	15.0	2682.0	34.0	2866	19	2866.0	19.0	6.4	Single Age
12WPY46_33	141.20	0.49	1.71000	0.03000	0.16860	0.00320	0.73035	1014.0	11.0	1004.0	17.0	1045	29	1004.0	17.0	1.0	Single Age
12WPY46_34	243.20	1.37	6.58200	0.09600	0.36650	0.00670	0.81308	2059.0	13.0	2012.0	32.0	2115	16	2115.0	16.0	4.9	Single Age
12WPY46_35	62.10	1.89	1.08700	0.02700	0.12110	0.00320	0.62930	747.0	13.0	736.0	18.0	783	48	736.0	18.0	1.5	Single Age
12WPY46_36	1150.00	1.35	0.95000	0.01300	0.11080	0.00190	0.73923	677.7	6.6	677.0	11.0	678	25	677.0	11.0	0.1	Single Age
12WPY46_37	286.00	1.71	1.46000	0.03400	0.14840	0.00340	0.74551	918.0	13.0	891.0	19.0	946	37	891.0	19.0	2.9	Single Age
12WPY46_38	223.00	2.22	0.82350	0.00910	0.09780	0.00110	0.50240	609.7	5.1	601.6	6.4	641	25	601.6	6.4	1.3	Single Age
12WPY46_39	262.00	3.42	1.71300	0.02500	0.16890	0.00250	0.56771	1013.9	9.2	1006.0	14.0	1021	28	1006.0	14.0	0.8	Single Age
12WPY46_40	90.20	0.75	1.75400	0.02400	0.17360	0.00300	0.52714	1027.8	8.8	1032.0	17.0	1041	31	1032.0	17.0	0.4	Single Age
12WPY46_41	354.00	0.99	1.01800	0.02200	0.11590	0.00220	0.63719	712.0	11.0	707.0	12.0	741	31	707.0	12.0	0.7	Single Age
12WPY46_42	114.00	0.38	1.71100	0.01800	0.16920	0.00160	0.38290	1013.2	6.7	1007.7	8.8	1011	22	1007.7	8.8	0.5	Single Age
12WPY46_43	699.00	2.16	0.87400	0.01500	0.10260	0.00210	0.78680	637.3	8.2	629.0	12.0	650	26	629.0	12.0	1.3	Single Age
12WPY46_44	84.10	0.92	1.64500	0.03600	0.16520	0.00300	0.71290	986.0	14.0	986.0	17.0	992	31	986.0	17.0	0.0	Single Age
12WPY46_45	149.80	0.53	0.83500	0.01500	0.10030	0.00190	0.55924	615.6	8.1	616.0	11.0	612	37	616.0	11.0	0.1	Single Age
12WPY46_46	100.30	0.86	1.66300	0.03400	0.16330	0.00330	0.59484	995.0	13.0	974.0	18.0	1019	37	974.0	18.0	2.1	Single Age
12WPY46_47	156.00	1.74	1.85400	0.02900	0.17950	0.00320	0.64232	1064.0	10.0	1064.0	17.0	1076	30	1064.0	17.0	0.0	Single Age
12WPY46_48	345.00	2.83	13.97000	0.23000	0.50370	0.00520	0.76837	2747.0	15.0	2629.0	22.0	2841	17	2841.0	17.0	7.5	Single Age
12WPY46_49	195.00	0.54	1.64400	0.03900	0.16500	0.00430	0.75142	985.0	15.0	984.0	24.0	995	34	984.0	24.0	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY46_50	369.00	0.98	0.83800	0.01100	0.10020	0.00140	0.60112	617.8	6.3	615.7	8.0	634	25	615.7	8.0	0.3	Single Age
12WPY46_51	169.00	0.65	6.11100	0.08500	0.36190	0.00560	0.68890	1992.0	12.0	1990.0	27.0	1999	21	1999.0	21.0	0.5	Single Age
12WPY46_52	120.00	2.91	0.89100	0.01500	0.10580	0.00170	0.55511	646.3	8.0	648.0	10.0	628	33	648.0	10.0	0.3	Single Age
12WPY46_53	104.90	1.44	1.48200	0.03200	0.15350	0.00280	0.64996	922.0	13.0	920.0	16.0	971	40	920.0	16.0	0.2	Rim
12WPY46_53	267.00	2.66	4.50000	0.17000	0.29130	0.00930	0.60274	1729.0	31.0	1648.0	46.0	1852	49	1852.0	49.0	11.0	Core
12WPY46_54	241.00	2.00	1.94000	0.02300	0.18560	0.00240	0.72821	1094.3	8.0	1097.0	13.0	1083	18	1097.0	13.0	0.2	Single Age
12WPY46_55	140.50	1.19	0.96200	0.01700	0.11060	0.00180	0.57533	685.8	8.9	676.0	10.0	693	30	676.0	10.0	1.4	Single Age
12WPY46_56	327.40	0.84	11.78000	0.18000	0.48210	0.00710	0.86905	2585.0	15.0	2535.0	31.0	2618	13	2618.0	13.0	3.2	Single Age
12WPY46_57	272.00	7.11	13.15000	0.31000	0.54300	0.01300	0.94359	2686.0	22.0	2793.0	55.0	2615	13	2615.0	13.0	6.8	Single Age
12WPY46_58	164.80	1.00	1.74500	0.02400	0.17220	0.00240	0.56615	1026.9	9.3	1024.0	13.0	1020	29	1024.0	13.0	0.3	Single Age
12WPY46_59	267.00	1.31	11.57000	0.16000	0.48170	0.00830	0.87531	2571.0	13.0	2533.0	36.0	2594	15	2594.0	15.0	2.4	Single Age
12WPY46_60	122.00	0.52	0.86900	0.01400	0.10300	0.00150	0.34794	634.7	7.4	632.1	8.7	643	38	632.1	8.7	0.4	Single Age
12WPY46_61	80.20	0.62	1.72700	0.02600	0.17400	0.00190	0.51143	1019.1	9.7	1034.0	10.0	1003	26	1034.0	10.0	1.5	Single Age
12WPY46_62	33.80	1.61	1.60000	0.03300	0.16230	0.00280	0.45179	971.0	13.0	969.0	16.0	999	43	969.0	16.0	0.2	Single Age
12WPY46_63	41.60	1.03	0.89900	0.02000	0.10520	0.00160	0.31644	650.0	11.0	644.5	9.5	687	47	644.5	9.5	0.8	Single Age
12WPY46_64	126.70	2.35	6.68400	0.07200	0.36480	0.00490	0.72270	2070.8	9.3	2007.0	23.0	2134	16	2134.0	16.0	6.0	Single Age
12WPY46_65	397.00	1.09	4.73000	0.14000	0.29870	0.00930	0.95665	1768.0	26.0	1682.0	46.0	1887	21	1887.0	21.0	10.9	Single Age
12WPY46_66	561.00	2.64	0.88300	0.04000	0.09610	0.00340	0.79500	641.0	21.0	591.0	20.0	817	62	591.0	20.0	7.8	Rim
12WPY46_66	52.20	1.01	1.40600	0.04200	0.14310	0.00510	0.63395	890.0	18.0	861.0	29.0	983	53	861.0	29.0	3.3	Core
12WPY46_67	138.90	1.08	4.39000	0.11000	0.29650	0.00920	0.80966	1708.0	22.0	1672.0	46.0	1746	36	1746.0	36.0	4.2	Single Age
12WPY46_68	453.00	8.40	2.02900	0.05500	0.16310	0.00400	0.80775	1127.0	18.0	973.0	22.0	1444	30	DISC	DISC	13.7	Single Age
12WPY46_69	140.20	0.73	5.12000	0.06500	0.32300	0.00490	0.73579	1838.0	11.0	1804.0	24.0	1878	19	1878.0	19.0	3.9	Single Age
12WPY46_70	693.00	1.09	11.67000	0.51000	0.49200	0.02000	0.95590	2563.0	42.0	2570.0	86.0	2560	22	2560.0	22.0	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY46_71	84.40	0.86	1.51900	0.03000	0.15470	0.00290	0.64894	938.0	12.0	927.0	16.0	954	33	927.0	16.0	1.2	Single Age
12WPY46_72	262.00	6.60	1.72100	0.02300	0.17040	0.00230	0.70432	1015.7	8.5	1014.0	13.0	1020	21	1014.0	13.0	0.2	Single Age
12WPY46_73	527.00	0.86	1.14500	0.01900	0.12100	0.00200	0.78783	774.3	8.9	736.0	12.0	877	23	736.0	12.0	4.9	Single Age
12WPY46_74	93.30	0.49	4.66000	0.10000	0.29540	0.00600	0.85263	1756.0	19.0	1675.0	31.0	1864	21	1864.0	21.0	10.1	Single Age
12WPY46_75	226.00	0.82	5.28700	0.08100	0.32070	0.00500	0.86032	1867.0	13.0	1792.0	24.0	1954	14	1954.0	14.0	8.3	Single Age
12WPY46_76	186.70	1.68	1.72300	0.01800	0.16740	0.00160	0.49900	1016.6	6.7	997.4	9.0	1055	20	997.4	9.0	1.9	Single Age
12WPY46_77	339.00	1.12	1.25200	0.04500	0.13590	0.00400	0.88636	824.0	21.0	821.0	23.0	849	35	821.0	23.0	0.4	Single Age
12WPY46_78	148.50	0.91	3.17800	0.04900	0.24490	0.00440	0.57671	1451.0	12.0	1411.0	23.0	1481	28	1481.0	28.0	4.7	Single Age
12WPY46_79	263.10	1.66	0.94030	0.00990	0.10970	0.00130	0.66382	672.8	5.2	671.2	7.5	671	20	671.2	7.5	0.2	Single Age
12WPY46_80	116.20	1.41	14.23000	0.20000	0.52670	0.00850	0.70842	2764.0	13.0	2726.0	36.0	2782	19	2782.0	19.0	2.0	Single Age
12WPY46_81	23.21	0.34	0.77100	0.02900	0.09320	0.00240	0.46684	581.0	16.0	574.0	14.0	657	72	574.0	14.0	1.2	Single Age
12WPY46_82	920.00	5.90	10.62000	0.35000	0.44400	0.01600	0.95489	2487.0	31.0	2361.0	70.0	2593	16	2593.0	16.0	8.9	Single Age
12WPY46_83	79.70	1.36	5.31000	0.13000	0.28920	0.00470	0.65388	1867.0	21.0	1637.0	23.0	2128	34	2128.0	34.0	23.1	Single Age
12WPY46_84	225.00	0.86	4.77000	0.29000	0.28600	0.01800	0.95749	1756.0	52.0	1609.0	88.0	1960	29	1960.0	29.0	17.9	Single Age
12WPY46_85	312.00	0.85	0.93700	0.01400	0.11090	0.00170	0.58351	670.7	7.4	677.7	9.6	653	29	677.7	9.6	1.0	Single Age
12WPY46_86	176.10	0.41	0.91000	0.01300	0.10630	0.00140	0.44336	656.5	6.9	651.3	8.0	691	31	651.3	8.0	0.8	Single Age
12WPY46_87	221.00	2.04	1.61700	0.02800	0.16400	0.00300	0.78828	977.0	11.0	979.0	16.0	967	25	979.0	16.0	0.2	Single Age
12WPY46_88	146.50	1.25	7.08800	0.08500	0.39460	0.00570	0.72377	2121.0	11.0	2143.0	27.0	2109	15	2109.0	15.0	1.6	Single Age
12WPY46_89	129.00	1.65	0.98900	0.02800	0.11420	0.00280	0.77553	700.0	14.0	697.0	16.0	731	34	697.0	16.0	0.4	Single Age
12WPY46_90	172.80	1.62	0.94700	0.01900	0.11080	0.00210	0.54948	676.0	10.0	679.0	12.0	682	40	679.0	12.0	0.4	Single Age
12WPY46_91	234.80	0.67	0.83200	0.01700	0.09920	0.00180	0.64365	613.9	9.3	609.0	11.0	637	35	609.0	11.0	0.8	Single Age
12WPY46_92	104.00	1.33	1.39000	0.02600	0.14350	0.00240	0.46921	885.0	11.0	864.0	14.0	920	37	864.0	14.0	2.4	Single Age
12WPY46_93	191.60	1.51	1.70800	0.03200	0.16880	0.00290	0.70196	1010.0	12.0	1005.0	16.0	1023	27	1005.0	16.0	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY46_94	112.90	0.53	1.92900	0.02300	0.18810	0.00260	0.59407	1092.7	7.8	1111.0	14.0	1071	25	1111.0	14.0	1.7	Single Age
12WPY46_95	1171.00	7.50	0.92800	0.01000	0.10660	0.00130	0.78687	666.1	5.5	652.9	7.8	705	16	652.9	7.8	2.0	Single Age
12WPY46_96	196.00	2.22	5.05000	0.11000	0.31860	0.00760	0.88522	1828.0	19.0	1781.0	37.0	1872	17	1872.0	17.0	4.9	Single Age
12WPY46_97	89.80	1.00	1.88100	0.03800	0.17540	0.00270	0.63900	1075.0	13.0	1042.0	15.0	1137	31	1042.0	15.0	3.1	Single Age
12WPY46_98	19.00	0.67	1.69400	0.04900	0.16860	0.00380	0.35740	1004.0	18.0	1004.0	21.0	980	64	1004.0	21.0	0.0	Single Age
12WPY46_99	120.00	47.50	0.74300	0.02800	0.08880	0.00140	0.41097	563.0	16.0	548.5	8.2	584	59	548.5	8.2	2.6	Rim
12WPY46_99	188.00	0.90	1.62900	0.03400	0.16030	0.00310	0.54305	981.0	13.0	958.0	17.0	1025	40	958.0	17.0	2.3	Core
12WPY46_100	461.00	2.06	11.57000	0.21000	0.45240	0.00850	0.76188	2571.0	18.0	2404.0	38.0	2699	21	2699.0	21.0	10.9	Single Age
12WPY46_101	93.50	1.27	1.68100	0.02300	0.16550	0.00240	0.51310	1000.6	8.6	987.0	13.0	1038	29	987.0	13.0	1.4	Single Age
12WPY46_102	94.60	0.89	1.05900	0.02000	0.12130	0.00200	0.57507	733.6	9.8	738.0	12.0	727	34	738.0	12.0	0.6	Single Age
12WPY46_103	71.50	3.45	0.85000	0.02200	0.10150	0.00240	0.68735	624.0	12.0	623.0	14.0	630	41	623.0	14.0	0.2	Single Age
12WPY46_104	251.00	1.53	5.75000	0.11000	0.34540	0.00600	0.75895	1941.0	16.0	1912.0	29.0	1962	22	1962.0	22.0	2.5	Single Age
12WPY46_105	163.00	2.12	12.35000	0.23000	0.53800	0.01100	0.77684	2634.0	17.0	2772.0	46.0	2523	24	2523.0	24.0	9.9	Single Age
12WPY46_106	467.00	5.47	1.79400	0.02100	0.17400	0.00210	0.79409	1042.7	7.5	1034.0	11.0	1061	14	1034.0	11.0	0.8	Single Age
12WPY46_107	187.60	2.36	0.92000	0.01500	0.10680	0.00160	0.48703	662.6	7.9	654.2	9.6	675	33	654.2	9.6	1.3	Single Age
12WPY46_108	186.20	4.78	0.88800	0.01600	0.10550	0.00170	0.63954	644.5	8.5	646.7	9.9	626	27	646.7	9.9	0.3	Single Age
12WPY46_109	301.00	2.19	1.42300	0.03000	0.13550	0.00250	0.75125	900.0	12.0	819.0	14.0	1090	32	819.0	14.0	9.0	Single Age
12WPY46_110	790.00	0.67	1.31700	0.02200	0.13770	0.00310	0.66900	854.0	10.0	834.0	17.0	898	33	834.0	17.0	2.3	Single Age
12WPY46_111	520.00	2.00	0.86800	0.01200	0.10280	0.00160	0.72807	635.0	6.5	631.8	9.1	659	23	631.8	9.1	0.5	Single Age
12WPY46_112	458.00	2.41	11.50000	0.20000	0.47130	0.00880	0.79995	2562.0	16.0	2487.0	38.0	2609	19	2609.0	19.0	4.7	Single Age
12WPY46_113	39.90	1.47	0.86300	0.02000	0.10220	0.00160	0.19895	631.0	11.0	627.3	9.4	647	56	627.3	9.4	0.6	Single Age
12WPY46_114	194.40	0.79	2.62200	0.09500	0.19180	0.00600	0.90110	1302.0	27.0	1130.0	32.0	1616	27	DISC	DISC	13.2	Single Age
12WPY46_115	61.30	0.60	1.62500	0.04400	0.15290	0.00320	0.24042	977.0	17.0	919.0	18.0	1108	49	919.0	18.0	5.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY46_116	110.90	1.38	1.70500	0.02500	0.16680	0.00260	0.71491	1009.7	9.4	994.0	14.0	1035	22	994.0	14.0	1.6	Single Age
12WPY46_117	96.10	1.85	15.61000	0.19000	0.52730	0.00800	0.81491	2852.0	11.0	2733.0	35.0	2951	13	2951.0	13.0	7.4	Single Age
12WPY46_118	22.80	0.63	1.21600	0.03400	0.12770	0.00310	0.35776	811.0	16.0	774.0	18.0	896	58	774.0	18.0	4.6	Single Age
12WPY46_119	251.00	5.11	1.09100	0.01900	0.12080	0.00220	0.77031	748.4	9.3	735.0	12.0	793	24	735.0	12.0	1.8	Single Age
12WPY46_120	477.00	5.24	0.97100	0.01600	0.11160	0.00190	0.65468	688.3	8.3	682.0	11.0	696	27	682.0	11.0	0.9	Single Age
12WPY46_121	244.00	2.02	0.75720	0.00970	0.09240	0.00110	0.50595	572.1	5.6	569.7	6.6	593	28	569.7	6.6	0.4	Single Age
12WPY46_122	129.00	0.56	1.68000	0.02400	0.16780	0.00210	0.59600	1001.2	9.3	1000.0	12.0	1001	23	1000.0	12.0	0.1	Single Age
12WPY46_123	177.20	1.87	0.92300	0.01600	0.10690	0.00180	0.08418	663.3	8.5	654.0	10.0	682	39	654.0	10.0	1.4	Single Age
12WPY46_124	342.00	0.60	1.66100	0.03800	0.16170	0.00390	0.78524	992.0	14.0	965.0	22.0	1031	30	965.0	22.0	2.7	Single Age
12WPY47_1	455.00	2.05	11.26000	0.16000	0.44550	0.00610	0.85144	2546.0	14.0	2379.0	28.0	2687	9	2686.6	8.6	11.4	Single Age
12WPY47_2	326.00	1.48	0.87900	0.01800	0.10200	0.00200	0.94943	638.0	10.0	626.0	11.0	680	10	626.0	11.0	1.9	Single Age
12WPY47_3	310.00	0.56	1.46000	0.01600	0.14770	0.00190	0.87829	913.6	6.8	888.0	11.0	967	7	888.0	11.0	2.8	Single Age
12WPY47_4	970.00	9.70	0.74200	0.01300	0.09060	0.00210	0.96411	562.9	7.5	559.0	12.0	590	11	559.0	12.0	0.7	Single Age
12WPY47_5	226.00	2.12	4.96300	0.05400	0.31270	0.00330	0.73422	1812.7	9.2	1754.0	16.0	1873	9	1873.0	9.4	6.4	Single Age
12WPY47_6	491.00	3.18	0.89200	0.03300	0.09900	0.00230	0.92094	645.0	18.0	608.0	14.0	759	33	608.0	14.0	5.7	Single Age
12WPY47_7	223.70	1.86	8.53000	0.14000	0.36500	0.00570	0.90952	2287.0	15.0	2005.0	27.0	2549	6	2548.7	6.2	21.3	Single Age
12WPY47_8	367.00	0.85	0.81800	0.00780	0.09770	0.00120	0.79080	606.8	4.4	601.0	7.0	633	11	601.0	7.0	1.0	Single Age
12WPY47_9	327.00	1.88	0.96800	0.02400	0.10970	0.00200	0.91393	686.0	12.0	671.0	12.0	736	20	671.0	12.0	2.2	Single Age
12WPY47_10	512.40	13.00	0.77610	0.00670	0.09205	0.00082	0.62457	583.6	3.9	567.6	4.8	641	9	567.6	4.8	2.7	Single Age
12WPY47_11	292.00	1.20	1.72700	0.01800	0.16810	0.00180	0.73720	1018.3	6.6	1001.6	9.7	1046	8	1001.6	9.7	1.6	Single Age
12WPY47_12	685.00	3.72	0.82630	0.00520	0.09755	0.00070	0.70747	611.8	2.9	600.0	4.1	653	6	600.0	4.1	1.9	Single Age
12WPY47_13	561.00	5.89	3.58000	0.13000	0.22050	0.00580	0.97444	1542.0	27.0	1283.0	31.0	1900	16	DISC	DISC	32.5	Single Age
12WPY47_14	182.00	0.68	1.73200	0.02200	0.17200	0.00170	0.71099	1020.2	8.2	1022.9	9.3	1027	14	1022.9	9.3	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY47_15	508.00	2.53	0.83260	0.00640	0.09911	0.00077	0.59798	615.0	3.5	609.2	4.5	646	9	609.2	4.5	0.9	Single Age
12WPY47_16	331.00	2.90	4.86900	0.09200	0.29930	0.00560	0.93575	1802.0	16.0	1687.0	28.0	1939	6	1938.6	5.9	13.0	Single Age
12WPY47_17	54.30	1.43	1.61700	0.02400	0.15830	0.00180	0.41093	977.3	9.2	947.1	9.8	1034	18	947.1	9.8	3.1	Single Age
12WPY47_18	258.00	0.85	1.65800	0.01600	0.16590	0.00150	0.71562	992.4	6.3	989.2	8.1	991	10	989.2	8.1	0.3	Single Age
12WPY47_19	151.00	0.67	1.71900	0.01400	0.16760	0.00130	0.65012	1015.3	5.1	998.6	7.1	1045	8	998.6	7.1	1.6	Single Age
12WPY47_20	116.30	2.06	6.56000	0.18000	0.29150	0.00720	0.95864	2052.0	24.0	1648.0	36.0	2469	9	DISC	DISC	33.2	Single Age
12WPY47_21	71.90	10.03	0.80200	0.01200	0.09775	0.00096	0.57465	597.5	6.7	601.2	5.6	589	19	601.2	5.6	0.6	Single Age
12WPY47_22	35.80	3.85	0.74000	0.03400	0.09060	0.00350	0.79482	561.0	20.0	558.0	20.0	587	28	558.0	20.0	0.5	Single Age
12WPY47_23	100.90	2.31	0.97800	0.01200	0.11340	0.00110	0.71266	692.4	6.0	692.3	6.4	698	7	692.3	6.4	0.0	Single Age
12WPY47_24	270.00	2.27	1.26900	0.02900	0.13640	0.00260	0.94444	831.0	13.0	824.0	15.0	855	11	824.0	15.0	0.8	Single Age
12WPY47_25	262.10	0.48	6.01100	0.05900	0.35530	0.00330	0.83922	1978.0	8.4	1959.0	16.0	2001	6	2001.0	6.4	2.1	Single Age
12WPY47_26	242.00	3.94	1.07200	0.03500	0.12070	0.00310	0.95583	737.0	17.0	734.0	18.0	744	17	734.0	18.0	0.4	Single Age
12WPY47_27	250.00	0.93	1.65400	0.02000	0.16430	0.00190	0.83605	990.5	7.9	982.0	10.0	998	7	982.0	10.0	0.9	Single Age
12WPY47_28	157.80	0.78	1.75700	0.01500	0.17370	0.00150	0.83069	1029.3	5.5	1032.4	8.0	1029	7	1032.4	8.0	0.3	Single Age
12WPY47_29	929.00	13.37	17.50000	0.19000	0.50930	0.00470	0.76930	2962.0	10.0	2654.0	20.0	3176	8	3176.3	8.1	16.4	Single Age
12WPY47_30	586.70	0.50	0.85720	0.00650	0.10058	0.00067	0.51487	628.5	3.5	617.8	3.9	668	9	617.8	3.9	1.7	Single Age
12WPY47_31	642.00	41.50	0.87360	0.00530	0.10276	0.00077	0.61707	637.5	2.9	630.5	4.5	667	8	630.5	4.5	1.1	Single Age
12WPY47_33	139.10	0.48	1.71500	0.02300	0.16900	0.00240	0.77202	1013.5	8.7	1006.0	13.0	1044	10	1006.0	13.0	0.7	Single Age
12WPY47_34	82.80	0.96	1.27800	0.02100	0.13800	0.00190	0.58721	835.3	9.6	833.0	11.0	851	17	833.0	11.0	0.3	Single Age
12WPY47_35	141.20	1.70	12.24000	0.17000	0.50160	0.00840	0.91914	2622.0	13.0	2625.0	37.0	2627	7	2626.8	6.9	0.1	Single Age
12WPY47_36	160.50	0.70	1.68600	0.01500	0.16520	0.00150	0.46944	1002.9	5.8	985.5	8.2	1036	12	985.5	8.2	1.7	Single Age
12WPY47_37	363.00	6.30	5.65800	0.04200	0.32950	0.00240	0.70747	1924.6	6.3	1836.0	11.0	2027	8	2026.8	7.8	9.4	Single Age
12WPY47_38	123.20	1.26	5.09600	0.05800	0.30080	0.00240	0.46249	1835.1	9.6	1695.0	12.0	1999	12	1999.0	12.0	15.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY47_39	152.00	1.01	1.54900	0.03500	0.15600	0.00330	0.95190	952.0	14.0	934.0	18.0	989	11	934.0	18.0	1.9	Single Age
12WPY47_40	378.00	3.95	0.93600	0.02600	0.10620	0.00190	0.63865	670.0	13.0	651.0	11.0	749	40	651.0	11.0	2.8	Single Age
12WPY47_41	192.00	1.17	1.33600	0.02400	0.13890	0.00120	0.32253	861.0	10.0	838.6	6.6	933	21	838.6	6.6	2.6	Single Age
12WPY47_42	42.90	0.45	1.74700	0.02800	0.16930	0.00210	0.82775	1025.0	11.0	1008.0	12.0	1074	17	1008.0	12.0	1.7	Single Age
12WPY47_43	156.70	0.75	3.05000	0.20000	0.22500	0.01000	0.98115	1406.0	52.0	1305.0	53.0	1594	41	1594.0	41.0	18.1	Single Age
12WPY47_45	321.00	0.63	0.86750	0.00730	0.10322	0.00089	0.68331	634.0	4.0	634.1	5.0	631	12	634.1	5.0	0.0	Single Age
12WPY47_46	152.60	0.65	1.83000	0.01700	0.17790	0.00170	0.79046	1056.0	6.0	1055.1	9.4	1057	6	1055.1	9.4	0.1	Single Age
12WPY47_47	54.10	0.61	11.32000	0.12000	0.46740	0.00650	0.88999	2549.0	10.0	2472.0	28.0	2623	6	2622.6	6.2	5.7	Single Age
12WPY47_48	219.00	5.60	5.02000	0.05200	0.30420	0.00300	0.85491	1822.3	8.7	1712.0	15.0	1955	6	1955.1	5.6	12.4	Single Age
12WPY47_50	981.00	3.55	0.87500	0.01800	0.09810	0.00140	0.93326	640.0	10.0	603.0	8.3	780	15	603.0	8.3	5.8	Single Age
12WPY47_51	169.00	0.73	2.60000	0.20000	0.18570	0.00520	0.95424	1269.0	61.0	1097.0	29.0	1540	120	DISC	DISC	13.6	Single Age
12WPY47_52	635.00	0.46	0.82470	0.00690	0.09580	0.00100	0.77892	610.5	3.8	589.4	6.1	699	11	589.4	6.1	3.5	Single Age
12WPY47_54	94.80	1.48	1.18400	0.02200	0.13230	0.00200	0.86322	792.0	10.0	801.0	11.0	760	14	801.0	11.0	1.1	Single Age
12WPY47_55	120.60	2.14	0.79000	0.01600	0.09230	0.00180	0.76994	590.3	9.2	570.0	11.0	658	13	570.0	11.0	3.4	Single Age
12WPY47_56	80.20	0.48	5.44500	0.05700	0.34390	0.00350	0.79100	1891.3	8.9	1905.0	17.0	1876	6	1876.4	6.0	1.5	Single Age
12WPY47_57	78.50	1.35	0.83300	0.01300	0.09990	0.00130	0.66038	614.8	7.1	613.7	7.7	628	16	613.7	7.7	0.2	Single Age
12WPY47_58	74.90	1.32	5.15000	0.14000	0.28160	0.00640	0.59536	1844.0	24.0	1598.0	32.0	2147	29	2147.0	29.0	25.6	Single Age
12WPY47_59	75.40	1.22	0.84000	0.02500	0.09300	0.00150	0.23731	618.0	13.0	573.4	8.6	829	70	573.4	8.6	7.2	Single Age
12WPY47_60	459.00	4.68	6.26100	0.08500	0.32330	0.00450	0.64013	2014.0	13.0	1806.0	22.0	2223	17	2223.0	17.0	18.8	Single Age
12WPY47_61	141.50	0.84	15.86600	0.09300	0.54840	0.00340	0.75064	2868.5	5.6	2818.0	14.0	2910	4	2909.8	3.8	3.2	Single Age
12WPY47_62	93.00	1.18	1.30600	0.01300	0.13980	0.00140	0.60509	848.0	5.9	843.2	8.0	870	11	843.2	8.0	0.6	Single Age
12WPY47_63	297.40	2.66	5.14700	0.08200	0.31220	0.00440	0.93115	1843.0	14.0	1751.0	22.0	1954	8	1954.4	8.3	10.4	Single Age
12WPY47_64	88.30	0.66	0.85900	0.01200	0.10110	0.00120	0.56970	629.4	6.5	620.6	7.0	659	15	620.6	7.0	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY47_65	162.60	0.94	1.30000	0.01100	0.13340	0.00110	0.73309	845.3	4.7	807.1	6.0	949	7	807.1	6.0	4.5	Single Age
12WPY47_67	556.00	9.88	0.87090	0.00770	0.10172	0.00096	0.76762	635.9	4.2	624.5	5.6	690	7	624.5	5.6	1.8	Single Age
12WPY47_68	212.00	1.46	1.32600	0.01400	0.13810	0.00150	0.66955	857.8	6.3	833.6	8.3	919	12	833.6	8.3	2.8	Single Age
12WPY47_69	309.00	9.70	0.89200	0.01100	0.10310	0.00110	0.62937	647.9	6.0	632.6	6.2	711	12	632.6	6.2	2.4	Single Age
12WPY47_70	251.00	1.11	0.77400	0.01600	0.09150	0.00200	0.88624	581.4	9.2	565.0	12.0	656	14	565.0	12.0	2.8	Single Age
12WPY47_71	117.00	10.40	0.79360	0.00930	0.09480	0.00100	0.51629	592.9	5.3	583.9	5.9	631	16	583.9	5.9	1.5	Single Age
12WPY47_72	369.00	17.00	3.46000	0.35000	0.23200	0.01700	0.99071	1511.0	87.0	1348.0	89.0	1725	77	1725.0	77.0	21.9	Single Age
12WPY47_73	256.00	2.03	0.91800	0.01100	0.10493	0.00086	0.30041	660.7	6.0	643.2	5.0	720	20	643.2	5.0	2.6	Single Age
12WPY47_74	119.00	1.43	0.90120	0.00810	0.10621	0.00076	0.46106	652.7	4.3	650.7	4.4	668	12	650.7	4.4	0.3	Single Age
12WPY47_75	347.00	3.91	1.04900	0.02100	0.11980	0.00210	0.88358	727.0	11.0	729.0	12.0	708	15	729.0	12.0	0.3	Single Age
12WPY47_76	218.00	109.00	0.88300	0.02900	0.10600	0.00290	0.81735	642.0	15.0	654.0	18.0	632	35	654.0	18.0	1.9	Rim
12WPY47_76	130.20	1.14	2.68300	0.04600	0.21260	0.00300	0.86900	1323.0	13.0	1243.0	16.0	1459	10	1459.0	10.0	14.8	Core
12WPY47_77	1636.00	0.85	1.32500	0.01100	0.13490	0.00110	0.84703	856.4	4.9	815.9	6.1	974	6	815.9	6.1	4.7	Single Age
12WPY47_78	110.30	1.32	7.03000	0.26000	0.30770	0.00940	0.97102	2115.0	33.0	1726.0	47.0	2506	15	DISC	DISC	31.1	Single Age
12WPY47_79	203.00	0.79	1.73000	0.01000	0.16993	0.00089	0.44685	1020.1	3.6	1011.7	4.9	1036	9	1011.7	4.9	0.8	Single Age
12WPY47_80	189.80	2.67	4.63000	0.27000	0.30200	0.01400	0.99179	1742.0	49.0	1697.0	70.0	1807	22	1807.0	22.0	6.1	Single Age
12WPY47_81	591.00	4.70	1.44200	0.04300	0.14880	0.00330	0.98142	903.0	19.0	894.0	19.0	952	13	894.0	19.0	1.0	Single Age
12WPY47_82	393.00	3.22	5.88000	0.11000	0.31920	0.00360	0.79418	1956.0	17.0	1786.0	17.0	2141	24	2141.0	24.0	16.6	Single Age
12WPY47_83	449.00	8.14	0.78800	0.01100	0.09440	0.00150	0.88312	589.9	6.5	581.5	8.6	627	8	581.5	8.6	1.4	Single Age
12WPY47_84	235.00	2.20	0.85510	0.00950	0.10260	0.00120	0.50368	627.2	5.2	629.4	7.0	642	13	629.4	7.0	0.4	Single Age
12WPY47_85	986.00	16.70	8.75200	0.06900	0.42320	0.00200	0.78404	2312.1	7.2	2275.0	9.2	2344	10	2343.8	9.7	2.9	Single Age
12WPY47_86	162.00	1.54	1.11200	0.01700	0.11910	0.00150	0.78497	758.4	8.4	725.2	8.9	858	14	725.2	8.9	4.4	Single Age
12WPY47_87	632.00	6.50	4.82000	0.05600	0.29810	0.00510	0.81738	1788.0	9.8	1681.0	25.0	1923	8	1923.4	7.9	12.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY47_88	279.00	6.33	1.78800	0.01000	0.17480	0.00110	0.66223	1040.9	3.7	1038.5	6.0	1052	6	1038.5	6.0	0.2	Single Age
12WPY47_89	255.00	1.55	1.41500	0.04100	0.14770	0.00340	0.94968	893.0	17.0	888.0	19.0	902	16	888.0	19.0	0.6	Single Age
12WPY47_90	304.00	1.04	1.27200	0.01000	0.13710	0.00140	0.64148	832.9	4.6	828.1	7.7	858	9	828.1	7.7	0.6	Single Age
12WPY47_91	384.00	1.98	2.68800	0.03200	0.22050	0.00320	0.82155	1324.8	8.7	1284.0	17.0	1388	9	1387.8	9.4	7.5	Single Age
12WPY47_92	1030.00	9.30	0.59700	0.01500	0.06900	0.00160	0.91379	474.9	9.5	430.2	9.5	713	15	430.2	9.5	9.4	Single Age
12WPY47_93	1276.00	5.02	0.70600	0.01200	0.07920	0.00150	0.91657	541.8	6.9	491.1	8.7	755	11	491.1	8.7	9.4	Single Age
12WPY47_94	517.00	3.25	9.97100	0.07700	0.40560	0.00340	0.80356	2432.5	7.3	2194.0	15.0	2636	5	2636.0	5.3	16.8	Single Age
12WPY47_95	102.00	2.99	6.09600	0.06700	0.34280	0.00280	0.82642	1989.0	9.6	1900.0	14.0	2080	7	2080.0	7.2	8.7	Single Age
12WPY47_96	357.00	2.71	0.88900	0.01200	0.10440	0.00130	0.72287	645.2	6.4	640.3	7.4	659	11	640.3	7.4	0.8	Single Age
12WPY47_97	196.00	2.49	0.98500	0.01100	0.11710	0.00100	0.70378	696.1	5.9	714.0	6.0	635	11	714.0	6.0	2.6	Single Age
12WPY47_98	397.00	2.35	12.54000	0.15000	0.49100	0.00570	0.91997	2645.0	11.0	2574.0	25.0	2705	4	2705.2	4.3	4.8	Single Age
12WPY47_99	207.90	2.74	8.77000	0.12000	0.41120	0.00460	0.72097	2314.0	12.0	2220.0	21.0	2390	16	2390.0	16.0	7.1	Single Age
12WPY47_100	13.38	0.09	4.03000	0.31000	0.25280	0.00720	0.80617	1604.0	33.0	1451.0	37.0	1834	40	1834.0	40.0	20.9	Single Age
12WPY47_101	256.00	1.41	5.02500	0.05900	0.30350	0.00330	0.90011	1823.0	10.0	1708.0	16.0	1951	5	1950.6	4.6	12.4	Single Age
12WPY47_102	274.00	1.73	4.85200	0.06200	0.29200	0.00330	0.84122	1793.0	11.0	1651.0	16.0	1964	9	1963.6	8.7	15.9	Single Age
12WPY47_103	198.10	0.76	1.20000	0.01100	0.13290	0.00120	0.05296	801.4	4.6	804.6	7.0	790	15	804.6	7.0	0.4	Single Age
12WPY47_104	81.70	0.51	5.68100	0.04400	0.34040	0.00260	0.75028	1929.2	6.8	1889.0	13.0	1967	6	1966.8	6.4	4.0	Single Age
12WPY47_105	717.00	14.80	3.69300	0.08900	0.23030	0.00550	0.92812	1568.0	19.0	1335.0	29.0	1902	11	1902.0	11.0	29.8	Single Age
12WPY47_106	125.40	1.14	4.65300	0.02900	0.31050	0.00160	0.59606	1758.5	5.3	1742.8	8.1	1782	6	1782.1	6.1	2.2	Single Age
12WPY47_107	578.00	2.62	5.20400	0.08400	0.29510	0.00470	0.91975	1852.0	14.0	1666.0	23.0	2064	6	2064.4	6.1	19.3	Single Age
12WPY47_108	173.80	2.86	0.95260	0.00920	0.11014	0.00075	0.42176	679.9	4.7	673.6	4.3	693	11	673.6	4.3	0.9	Single Age
12WPY47_109	8.70	23.90	0.70600	0.04300	0.07220	0.00480	0.42035	543.0	25.0	448.0	29.0	1123	70	DISC	DISC	17.5	Single Age
12WPY47_110	270.70	1.59	8.12000	0.14000	0.39390	0.00500	0.91838	2243.0	16.0	2140.0	23.0	2329	15	2329.0	15.0	8.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY47_111	96.80	2.12	1.75200	0.01900	0.16840	0.00210	0.58585	1027.5	7.1	1003.0	12.0	1066	15	1003.0	12.0	2.4	Single Age
12WPY47_112	124.20	1.83	1.47400	0.02100	0.15150	0.00130	0.89382	918.9	9.0	909.3	7.6	954	11	909.3	7.6	1.0	Single Age
12WPY47_113	40.50	0.71	1.74900	0.02400	0.17260	0.00170	0.37370	1025.9	8.7	1026.4	9.1	1037	13	1026.4	9.1	0.0	Single Age
12WPY47_114	100.50	1.09	11.87000	0.12000	0.47890	0.00430	0.90243	2593.3	9.8	2522.0	19.0	2636	8	2636.1	7.6	4.3	Single Age
12WPY47_115	1033.00	21.70	4.45200	0.05000	0.29160	0.00320	0.80068	1721.3	9.4	1649.0	16.0	1804	12	1804.0	12.0	8.6	Single Age
12WPY47_116	207.40	1.52	1.43400	0.02500	0.14710	0.00200	0.91223	903.0	10.0	885.0	11.0	961	15	885.0	11.0	2.0	Single Age
12WPY47_117	125.10	0.85	12.68000	0.10000	0.49290	0.00360	0.60404	2656.6	7.7	2583.0	15.0	2712	8	2711.6	7.9	4.7	Single Age
12WPY47_118	78.30	0.77	1.62200	0.02500	0.16270	0.00160	0.22121	978.2	9.5	971.7	9.1	1010	20	971.7	9.1	0.7	Single Age
12WPY47_119	211.50	1.77	0.91020	0.00630	0.10695	0.00073	0.47500	657.1	3.3	655.0	4.3	668	10	655.0	4.3	0.3	Single Age
12WPY47_120	368.00	1.02	0.85100	0.01400	0.10250	0.00170	0.92003	624.6	7.8	629.0	10.0	615	7	629.0	10.0	0.7	Single Age
12WPY47_121	223.80	2.48	6.61600	0.05500	0.37820	0.00320	0.83185	2061.1	7.3	2068.0	15.0	2059	5	2059.1	5.3	0.4	Single Age
12WPY47_122	22.50	1.01	1.49400	0.02800	0.15100	0.00210	0.31820	927.0	11.0	906.0	12.0	994	26	906.0	12.0	2.3	Single Age
12WPY47_123	902.00	2.39	1.62700	0.01200	0.15830	0.00110	0.82583	980.5	4.7	947.3	6.2	1053	8	947.3	6.2	3.4	Single Age
12WPY47_124	440.00	5.30	1.52900	0.01500	0.15540	0.00150	0.86584	941.7	6.1	930.8	8.2	969	6	930.8	8.2	1.2	Single Age
12WPY55_1	268.00	3.74	0.95700	0.00760	0.11090	0.00100	0.53361	681.6	4.0	678.0	5.9	689	8	678.0	5.9	0.5	Single Age
12WPY55_3	102.30	1.41	1.32670	0.00920	0.14280	0.00140	0.41608	857.3	4.0	860.2	7.8	842	9	860.2	7.8	0.3	Single Age
12WPY55_4	579.00	1.55	9.62000	0.29000	0.40500	0.01100	0.94591	2400.0	27.0	2190.0	53.0	2576	10	2576.0	10.0	15.0	Single Age
12WPY55_5	55.60	0.63	11.95000	0.11000	0.49260	0.00520	0.90175	2601.6	9.2	2581.0	22.0	2614	7	2613.8	6.5	1.3	Single Age
12WPY55_6	432.00	1.67	0.95090	0.00860	0.11050	0.00130	0.80734	678.9	4.5	675.7	7.5	686	9	675.7	7.5	0.5	Single Age
12WPY55_7	95.30	1.21	0.96700	0.01000	0.11350	0.00150	0.23986	687.0	5.4	693.0	8.5	667	21	693.0	8.5	0.9	Single Age
12WPY55_8	75.90	0.82	0.78700	0.01800	0.09510	0.00140	0.56574	589.0	10.0	585.4	8.4	622	34	585.4	8.4	0.6	Single Age
12WPY55_9	319.00	4.81	0.95600	0.02400	0.11290	0.00340	0.81683	681.0	12.0	689.0	20.0	682	19	689.0	20.0	1.2	Rim
12WPY55_9	162.20	0.86	1.28400	0.02500	0.13600	0.00220	0.78315	840.0	11.0	822.0	12.0	890	11	822.0	12.0	2.1	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY55_10	406.00	98.50	0.87810	0.00660	0.10495	0.00087	0.55773	639.9	3.6	643.3	5.1	632	9	643.3	5.1	0.5	Single Age
12WPY55_11	249.20	0.77	5.53300	0.03700	0.33510	0.00320	0.67749	1905.5	5.8	1863.0	15.0	1948	7	1947.5	7.3	4.3	Single Age
12WPY55_12	147.00	10.79	0.82400	0.01600	0.09750	0.00180	0.64344	610.1	8.8	600.0	11.0	668	17	600.0	11.0	1.7	Rim
12WPY55_12	143.30	1.28	1.06100	0.02600	0.11550	0.00300	0.80167	734.0	13.0	704.0	17.0	827	25	704.0	17.0	4.1	Core
12WPY55_13	1080.00	15.30	0.83100	0.01400	0.09770	0.00180	0.80085	614.7	8.2	601.0	10.0	663	9	601.0	10.0	2.2	Single Age
12WPY55_14	205.00	0.80	1.02700	0.01400	0.11730	0.00190	0.44573	717.5	6.8	715.0	11.0	734	22	715.0	11.0	0.3	Single Age
12WPY55_15	187.80	8.22	0.83070	0.00970	0.09840	0.00110	0.66571	613.7	5.4	605.1	6.2	646	12	605.1	6.2	1.4	Single Age
12WPY55_16	373.00	5.43	0.85600	0.01300	0.10110	0.00120	0.47232	627.6	7.0	622.6	7.7	640	19	622.6	7.7	0.8	Rim
12WPY55_16	274.00	3.36	1.22200	0.01300	0.12120	0.00110	0.61973	810.6	6.0	737.2	6.5	1015	14	737.2	6.5	9.1	Core
12WPY55_17	136.70	1.04	7.34000	0.10000	0.39590	0.00430	0.81703	2154.0	12.0	2149.0	20.0	2157	11	2157.0	11.0	0.4	Single Age
12WPY55_18	380.00	1.14	0.71500	0.01700	0.08900	0.00220	0.82205	548.0	10.0	549.0	13.0	549	19	549.0	13.0	0.2	Rim
12WPY55_18	157.80	1.03	0.76240	0.00920	0.09400	0.00110	0.42501	575.3	5.3	580.4	6.7	553	16	580.4	6.7	0.9	Core
12WPY55_19	79.20	0.39	0.73410	0.00890	0.09200	0.00130	0.64732	559.4	5.1	567.2	7.6	526	13	567.2	7.6	1.4	Single Age
12WPY55_21	61.60	0.63	1.79900	0.02200	0.17710	0.00250	0.64503	1044.7	8.0	1051.0	14.0	1038	12	1051.0	14.0	0.6	Single Age
12WPY55_24	277.40	0.78	1.87800	0.01900	0.18130	0.00200	0.89873	1073.8	6.9	1074.0	11.0	1068	6	1074.0	11.0	0.0	Single Age
12WPY55_25	52.90	0.96	1.23000	0.01900	0.13600	0.00220	0.73918	813.8	8.9	822.0	12.0	798	19	822.0	12.0	1.0	Single Age
12WPY55_26	61.80	1.51	0.98400	0.01300	0.11360	0.00110	0.48020	695.5	6.4	693.4	6.2	704	15	693.4	6.2	0.3	Single Age
12WPY55_27	94.50	1.45	0.86700	0.01400	0.10350	0.00180	0.53532	633.4	7.6	635.0	11.0	620	23	635.0	11.0	0.3	Single Age
12WPY55_28	240.20	1.32	1.03860	0.00820	0.12120	0.00094	0.64744	723.1	4.1	737.4	5.4	693	8	737.4	5.4	2.0	Single Age
12WPY55_29	58.50	1.15	0.87900	0.01200	0.10180	0.00120	0.56699	641.3	6.4	625.0	6.9	689	16	625.0	6.9	2.5	Single Age
12WPY55_30	70.00	0.61	0.79280	0.00900	0.09709	0.00091	0.49676	592.5	5.1	597.3	5.4	573	16	597.3	5.4	0.8	Single Age
12WPY55_31	196.00	1.93	12.05100	0.08200	0.48940	0.00360	0.64688	2609.0	6.2	2568.0	16.0	2639	6	2639.2	6.4	2.7	Single Age
12WPY55_32	359.00	1.75	1.76800	0.01700	0.17270	0.00200	0.78113	1033.4	6.4	1027.0	11.0	1046	9	1027.0	11.0	0.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY55_33	172.60	0.69	1.41000	0.02100	0.14970	0.00180	0.24226	892.7	8.7	899.3	9.9	875	14	899.3	9.9	0.7	Single Age
12WPY55_34	93.00	0.93	0.84290	0.00900	0.10159	0.00092	0.46385	620.5	4.9	623.7	5.4	624	14	623.7	5.4	0.5	Single Age
12WPY55_35	103.00	0.82	5.15600	0.08900	0.32750	0.00620	0.80069	1846.0	14.0	1829.0	31.0	1888	12	1888.0	12.0	3.1	Single Age
12WPY55_37	303.50	1.53	0.99100	0.01500	0.11470	0.00210	0.68017	698.8	7.6	700.0	12.0	693	21	700.0	12.0	0.2	Single Age
12WPY55_38	170.00	0.59	1.78900	0.01700	0.17660	0.00190	0.75588	1042.6	6.2	1048.0	10.0	1021	9	1048.0	10.0	0.5	Single Age
12WPY55_39	115.10	0.41	2.46700	0.02100	0.21560	0.00230	0.69102	1262.1	6.1	1260.0	12.0	1260	7	1260.2	7.1	0.0	Single Age
12WPY55_40	81.30	0.53	1.87400	0.02600	0.18210	0.00210	0.61781	1071.5	9.2	1079.0	12.0	1040	15	1079.0	12.0	0.7	Single Age
12WPY55_41	246.00	1.80	6.94800	0.09300	0.38650	0.00440	0.87334	2106.0	11.0	2106.0	20.0	2097	8	2096.9	8.3	0.4	Single Age
12WPY55_42	31.41	0.96	1.15800	0.02100	0.12830	0.00170	0.17148	780.0	9.7	777.8	9.6	780	20	777.8	9.6	0.3	Single Age
12WPY55_43	307.00	0.65	1.94000	0.01600	0.18590	0.00160	0.77549	1094.9	5.5	1098.9	8.5	1092	8	1098.9	8.5	0.4	Single Age
12WPY55_44	312.30	0.95	0.82000	0.01300	0.09910	0.00190	0.42706	608.1	7.5	609.0	11.0	622	29	609.0	11.0	0.1	Single Age
12WPY55_45	65.40	1.53	0.72800	0.01200	0.09200	0.00130	0.51600	555.1	6.8	567.4	7.9	513	18	567.4	7.9	2.2	Single Age
12WPY55_46	110.70	6.60	0.95300	0.04700	0.11200	0.00420	0.85545	679.0	25.0	684.0	25.0	699	20	684.0	25.0	0.7	Rim
12WPY55_46	119.00	0.57	1.32400	0.01400	0.14240	0.00180	0.49470	856.3	6.3	858.0	10.0	846	15	858.0	10.0	0.2	Core
12WPY55_47	53.20	2.49	0.88700	0.01100	0.10520	0.00110	0.59246	644.3	6.1	645.0	6.6	638	17	645.0	6.6	0.1	Single Age
12WPY55_48	108.50	0.46	1.52500	0.02300	0.15520	0.00170	0.71037	941.1	9.3	930.1	9.3	977	15	930.1	9.3	1.2	Single Age
12WPY55_49	150.70	0.98	6.42700	0.04300	0.37200	0.00300	0.68861	2035.7	5.9	2039.0	14.0	2043	6	2042.8	6.4	0.2	Single Age
12WPY55_50	92.10	1.52	0.85100	0.01100	0.10120	0.00110	0.46909	624.9	5.9	621.7	6.3	633	14	621.7	6.3	0.5	Single Age
12WPY55_51	109.00	0.92	1.80800	0.02600	0.17240	0.00170	0.65647	1047.7	9.3	1025.2	9.6	1080	20	1025.2	9.6	2.1	Single Age
12WPY55_52	211.60	1.21	0.89590	0.00850	0.10680	0.00110	0.67467	649.3	4.5	653.9	6.3	642	8	653.9	6.3	0.7	Single Age
12WPY55_53	396.00	24.00	0.92900	0.01000	0.10910	0.00140	0.74337	666.7	5.5	667.3	7.9	668	11	667.3	7.9	0.1	Single Age
12WPY55_54	225.00	5.11	1.57200	0.02600	0.15660	0.00260	0.70214	959.0	10.0	938.0	14.0	997	19	938.0	14.0	2.2	Single Age
12WPY55_56	278.70	1.94	2.75100	0.02500	0.23040	0.00260	0.66509	1342.9	6.7	1337.0	13.0	1354	7	1354.2	7.0	1.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY55_57	265.00	0.85	1.46800	0.04300	0.15300	0.00420	0.92524	921.0	16.0	918.0	23.0	918	16	918.0	23.0	0.3	Single Age
12WPY55_58	61.90	0.76	5.37400	0.08900	0.34180	0.00640	0.67584	1880.0	14.0	1895.0	31.0	1866	23	1866.0	23.0	1.6	Single Age
12WPY55_59	613.00	1.58	0.51700	0.02200	0.06380	0.00160	0.83236	423.0	14.0	398.9	9.6	532	13	398.9	9.6	5.7	Rim
12WPY55_59	97.10	2.61	0.88230	0.00950	0.10410	0.00110	0.51566	642.1	5.1	638.6	6.2	649	13	638.6	6.2	0.5	Core
12WPY55_60	328.60	1.21	11.70000	0.15000	0.47520	0.00580	0.94287	2580.0	12.0	2505.0	25.0	2630	7	2629.6	6.7	4.7	Single Age
12WPY55_61	580.00	3.73	0.59390	0.00660	0.07679	0.00071	0.57726	473.2	4.2	476.9	4.2	451	12	476.9	4.2	0.8	Single Age
12WPY55_62	500.00	8.84	0.82130	0.00820	0.09482	0.00088	0.67590	608.6	4.6	584.0	5.2	709	8	584.0	5.2	4.0	Single Age
12WPY55_63	556.00	48.70	0.95000	0.01200	0.10950	0.00160	0.82005	678.2	6.3	669.9	9.5	691	10	669.9	9.5	1.2	Single Age
12WPY55_64	114.30	0.89	12.14000	0.11000	0.49340	0.00400	0.62155	2616.2	8.2	2585.0	17.0	2644	9	2643.5	9.0	2.2	Single Age
12WPY55_65	189.20	1.79	6.20000	0.06200	0.36810	0.00440	0.72783	2003.8	8.7	2022.0	20.0	1988	7	1987.7	7.2	1.7	Single Age
12WPY55_66	136.00	0.63	5.28400	0.05400	0.33740	0.00340	0.79589	1865.6	8.8	1874.0	16.0	1864	7	1863.9	6.6	0.5	Single Age
12WPY55_67	116.20	1.17	0.67710	0.00730	0.08540	0.00088	0.41319	524.9	4.4	528.2	5.2	521	13	528.2	5.2	0.6	Single Age
12WPY55_68	171.00	1.24	1.02100	0.01000	0.11800	0.00130	0.57215	714.1	5.1	719.2	7.4	699	11	719.2	7.4	0.7	Single Age
12WPY55_69	141.00	3.20	1.45700	0.04100	0.15130	0.00360	0.86638	911.0	17.0	908.0	20.0	902	20	908.0	20.0	0.3	Single Age
12WPY55_70	109.00	0.81	0.88410	0.00940	0.10570	0.00100	0.46095	643.0	5.1	647.5	6.1	614	12	647.5	6.1	0.7	Single Age
12WPY55_71	294.00	5.20	0.85300	0.01100	0.10230	0.00140	0.82324	626.5	6.4	627.6	7.9	632	11	627.6	7.9	0.2	Single Age
12WPY55_72	102.90	0.67	5.15100	0.08900	0.31980	0.00700	0.70779	1844.0	15.0	1788.0	34.0	1909	15	1909.0	15.0	6.3	Single Age
12WPY55_73	122.60	0.86	1.12300	0.02300	0.12710	0.00200	0.60696	764.0	11.0	771.0	11.0	741	23	771.0	11.0	0.9	Single Age
12WPY55_75	72.97	1.85	0.88700	0.01100	0.10540	0.00100	0.57543	645.4	5.9	645.9	5.9	648	15	645.9	5.9	0.1	Single Age
12WPY55_76	300.90	0.93	11.58700	0.08100	0.48990	0.00380	0.84203	2571.2	6.5	2570.0	17.0	2574	3	2573.6	3.0	0.1	Single Age
12WPY55_79	285.00	1.64	1.64700	0.02200	0.16330	0.00230	0.73729	987.7	8.5	975.0	13.0	1013	11	975.0	13.0	1.3	Single Age
12WPY55_80	671.00	1.94	0.80710	0.00990	0.09360	0.00120	0.77339	600.7	5.5	576.8	6.8	689	14	576.8	6.8	4.0	Single Age
12WPY55_81	832.00	3.17	0.64000	0.02500	0.08040	0.00350	0.89296	502.0	15.0	498.0	21.0	532	25	498.0	21.0	0.8	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY55_81	376.20	0.62	0.73300	0.01400	0.09080	0.00190	0.53165	557.9	8.4	560.0	11.0	564	28	560.0	11.0	0.4	Core
12WPY55_82	161.50	0.94	5.44800	0.05500	0.34020	0.00330	0.88083	1891.8	8.9	1887.0	16.0	1899	8	1898.9	8.1	0.6	Single Age
12WPY55_83	83.10	0.97	1.02300	0.01400	0.11610	0.00160	0.16900	714.9	7.2	708.1	9.2	731	16	708.1	9.2	1.0	Single Age
12WPY55_84	175.00	0.71	0.81280	0.00830	0.09760	0.00110	0.56674	603.8	4.7	600.5	6.5	614	13	600.5	6.5	0.5	Single Age
12WPY55_85	152.50	0.71	0.99610	0.00820	0.11610	0.00100	0.30671	701.7	4.2	707.8	6.0	692	13	707.8	6.0	0.9	Single Age
12WPY55_86	58.70	1.28	0.91300	0.01500	0.10720	0.00150	0.65948	659.5	8.4	656.4	9.0	689	17	656.4	9.0	0.5	Single Age
12WPY55_87	104.20	0.86	6.47300	0.06800	0.36920	0.00470	0.79449	2041.5	9.3	2025.0	22.0	2054	8	2053.6	8.0	1.4	Single Age
12WPY55_88	571.00	1.07	0.85400	0.00580	0.10062	0.00072	0.54689	627.2	3.3	618.0	4.2	664	8	618.0	4.2	1.5	Single Age
12WPY55_89	298.50	1.67	12.73500	0.07400	0.50410	0.00410	0.73313	2660.0	5.5	2631.0	18.0	2676	6	2676.1	5.8	1.7	Single Age
12WPY55_90	155.70	3.31	0.93190	0.00920	0.10910	0.00110	0.57142	668.4	4.8	667.4	6.7	656	12	667.4	6.7	0.1	Single Age
12WPY55_91	261.00	0.94	1.19900	0.01200	0.13170	0.00160	0.64251	799.7	5.6	797.7	9.2	807	10	797.7	9.2	0.3	Single Age
12WPY55_93	184.20	1.37	1.77100	0.01500	0.17340	0.00170	0.69160	1034.7	5.6	1030.8	9.2	1041	10	1030.8	9.2	0.4	Single Age
12WPY55_94	354.00	4.12	12.68000	0.24000	0.50790	0.00980	0.83563	2655.0	18.0	2655.0	40.0	2666	9	2665.8	8.7	0.4	Single Age
12WPY55_95	35.40	0.90	1.38200	0.02100	0.13930	0.00150	0.28585	882.0	8.9	840.4	8.6	968	20	840.4	8.6	4.7	Single Age
12WPY55_96	88.60	1.18	1.34800	0.02000	0.13430	0.00280	0.64565	866.6	8.7	812.0	16.0	998	17	812.0	16.0	6.3	Single Age
12WPY55_97	314.00	1.26	1.29400	0.01700	0.13840	0.00210	0.84765	842.7	7.7	835.0	12.0	853	9	835.0	12.0	0.9	Single Age
12WPY55_98	105.20	1.62	6.02000	0.15000	0.35890	0.00850	0.94233	1977.0	22.0	1976.0	40.0	1980	8	1980.4	8.2	0.2	Single Age
12WPY55_99	364.00	0.66	1.68700	0.01500	0.16660	0.00200	0.37291	1003.5	5.8	993.0	11.0	1024	10	993.0	11.0	1.0	Single Age
12WPY55_100	551.00	2.66	0.85300	0.02800	0.09610	0.00290	0.87736	625.0	16.0	591.0	17.0	744	33	591.0	17.0	5.4	Single Age
12WPY55_101	174.00	1.43	1.14200	0.06500	0.12480	0.00360	0.77621	773.0	31.0	758.0	20.0	823	44	758.0	20.0	1.9	Rim
12WPY55_101	62.57	0.58	1.67800	0.02500	0.16610	0.00260	0.65994	999.5	9.5	990.0	15.0	1021	14	990.0	15.0	1.0	Core
12WPY55_102	157.00	0.58	0.90210	0.00910	0.10670	0.00100	0.49671	652.6	4.9	653.2	6.0	647	14	653.2	6.0	0.1	Single Age
12WPY55_103	186.00	0.51	1.24100	0.02400	0.13490	0.00210	0.60120	819.0	11.0	815.0	12.0	827	33	815.0	12.0	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY55_104	230.80	3.73	1.27200	0.02800	0.13720	0.00210	0.85334	832.0	13.0	830.0	12.0	841	18	830.0	12.0	0.2	Single Age
12WPY55_105	64.20	0.52	1.77700	0.02400	0.17380	0.00220	0.38840	1036.5	8.9	1033.0	12.0	1041	14	1033.0	12.0	0.3	Single Age
12WPY55_106	28.80	0.78	1.77500	0.03000	0.17590	0.00280	0.71577	1035.0	11.0	1047.0	16.0	1047	17	1047.0	16.0	1.2	Single Age
12WPY55_107	140.90	1.44	0.99700	0.02900	0.11570	0.00520	0.76439	702.0	15.0	706.0	30.0	687	17	706.0	30.0	0.6	Rim
12WPY55_107	145.70	0.81	1.37100	0.01900	0.14330	0.00150	0.61433	876.1	8.1	863.0	8.6	897	17	863.0	8.6	1.5	Core
12WPY55_108	389.00	1.01	0.95930	0.00830	0.11070	0.00120	0.67339	682.8	4.3	676.8	6.7	700	10	676.8	6.7	0.9	Single Age
12WPY55_109	78.40	0.63	6.29000	0.11000	0.36450	0.00650	0.77091	2016.0	15.0	2002.0	31.0	2032	12	2032.0	12.0	1.5	Single Age
12WPY55_110	132.60	0.75	11.46000	0.08000	0.47220	0.00400	0.80852	2561.0	6.5	2493.0	17.0	2610	5	2610.0	4.8	4.5	Single Age
12WPY55_111	198.00	0.99	5.72600	0.06000	0.33740	0.00410	0.76508	1934.7	9.1	1874.0	20.0	1988	9	1987.9	9.0	5.7	Single Age
12WPY55_112	212.00	9.55	0.79230	0.00780	0.09590	0.00089	0.61512	592.9	4.3	590.3	5.2	590	10	590.3	5.2	0.4	Single Age
12WPY55_113	51.87	0.68	4.58900	0.06600	0.31170	0.00400	0.74720	1747.0	12.0	1749.0	20.0	1753	9	1753.3	9.1	0.2	Single Age
12WPY55_114	29.74	0.68	1.67200	0.02700	0.16620	0.00190	0.31238	998.8	9.8	991.0	10.0	1007	18	991.0	10.0	0.8	Single Age
12WPY55_115	156.00	9.64	1.01600	0.01800	0.11660	0.00180	0.82641	711.8	8.9	711.0	10.0	726	10	711.0	10.0	0.1	Rim
12WPY55_115	21.77	1.40	1.73500	0.05300	0.17000	0.00500	0.55627	1025.0	21.0	1012.0	28.0	1065	34	1012.0	28.0	1.3	Core
12WPY55_118	78.10	0.80	1.72500	0.02100	0.17010	0.00210	0.85231	1017.4	7.9	1012.0	12.0	1022	12	1012.0	12.0	0.5	Single Age
12WPY55_119	228.60	0.92	1.74100	0.01200	0.17130	0.00130	0.61448	1024.2	4.6	1019.3	7.0	1037	9	1019.3	7.0	0.5	Single Age
12WPY55_120	53.86	0.59	0.85400	0.01800	0.10280	0.00140	0.17302	626.0	10.0	630.7	8.4	604	23	630.7	8.4	0.8	Single Age
12WPY55_121	69.00	0.77	5.64600	0.08800	0.34320	0.00560	0.85072	1926.0	16.0	1901.0	27.0	1954	14	1954.0	14.0	2.7	Single Age
12WPY56_1	130.20	0.72	1.91900	0.02000	0.18340	0.00210	0.78138	1087.4	7.0	1085.0	12.0	1077	12	1085.0	12.0	0.2	Single Age
12WPY56_2	67.30	0.74	6.74500	0.06500	0.37930	0.00390	0.56890	2077.8	8.5	2073.0	18.0	2072	10	2071.7	9.9	0.1	Single Age
12WPY56_3	632.00	10.44	0.92580	0.00780	0.10790	0.00100	0.70368	665.3	4.1	660.2	5.9	695	10	660.2	5.9	0.8	Single Age
12WPY56_4	313.00	1.71	4.66700	0.05500	0.29810	0.00380	0.84748	1764.0	10.0	1681.0	19.0	1857	7	1857.4	6.8	9.5	Single Age
12WPY56_5	121.90	1.31	1.28100	0.02100	0.13770	0.00220	0.57985	839.0	10.0	832.0	13.0	867	24	832.0	13.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY56_6	647.00	15.80	0.87400	0.01400	0.10230	0.00150	0.64981	637.6	7.8	627.6	8.7	675	13	627.6	8.7	1.6	Rim
12WPY56_6	247.00	2.42	1.05000	0.02900	0.12070	0.00210	0.71208	729.0	14.0	735.0	12.0	707	33	735.0	12.0	0.8	Core
12WPY56_7	495.00	2.01	1.86400	0.03800	0.17380	0.00290	0.92196	1071.0	13.0	1033.0	16.0	1146	11	1033.0	16.0	3.5	Single Age
12WPY56_8	108.50	0.89	10.46000	0.15000	0.43400	0.00680	0.81421	2478.0	13.0	2328.0	30.0	2610	9	2609.6	8.7	10.8	Single Age
12WPY56_9	80.60	0.92	0.91700	0.01600	0.10700	0.00180	0.49369	661.9	8.9	655.0	11.0	665	23	655.0	11.0	1.0	Single Age
12WPY56_10	326.00	2.23	1.55700	0.02100	0.16510	0.00240	0.76308	952.8	8.2	985.0	13.0	907	12	985.0	13.0	3.4	Single Age
12WPY56_11	244.20	2.30	0.91100	0.01900	0.10460	0.00240	0.71590	657.0	10.0	641.0	14.0	686	31	641.0	14.0	2.4	Single Age
12WPY56_12	706.00	2.22	4.79000	0.15000	0.24620	0.00660	0.90914	1779.0	27.0	1424.0	36.0	2219	12	DISC	DISC	35.8	Single Age
12WPY56_13	33.78	0.78	0.81000	0.01700	0.09680	0.00150	0.62293	603.1	9.5	595.5	8.8	644	21	595.5	8.8	1.3	Single Age
12WPY56_14	203.30	0.49	0.95650	0.00840	0.11249	0.00095	0.17750	681.3	4.3	687.2	5.5	661	11	687.2	5.5	0.9	Single Age
12WPY56_15	271.00	2.00	0.89300	0.01400	0.10620	0.00200	0.64740	649.4	7.4	651.0	11.0	639	22	651.0	11.0	0.2	Single Age
12WPY56_16	215.00	10.90	0.91600	0.02000	0.10830	0.00220	0.50515	660.0	11.0	663.0	13.0	667	26	663.0	13.0	0.5	Rim
12WPY56_16	194.00	1.83	1.22300	0.03300	0.13310	0.00310	0.82139	811.0	15.0	806.0	18.0	820	16	806.0	18.0	0.6	Core
12WPY56_17	99.80	1.11	1.17000	0.01500	0.12740	0.00160	0.53117	786.1	7.1	772.9	9.2	835	18	772.9	9.2	1.7	Single Age
12WPY56_18	292.60	0.98	1.73400	0.01700	0.17130	0.00170	0.79841	1021.0	6.5	1019.1	9.3	1018	7	1019.1	9.3	0.2	Single Age
12WPY56_19	200.60	55.80	0.93030	0.00780	0.11100	0.00110	0.28783	667.7	4.1	678.6	6.1	632	13	678.6	6.1	1.6	Single Age
12WPY56_20	293.00	18.80	1.28600	0.02800	0.14030	0.00310	0.67329	839.0	13.0	846.0	17.0	814	25	846.0	17.0	0.8	Rim
12WPY56_20	177.70	2.39	5.53000	0.08600	0.28320	0.00410	0.54981	1907.0	14.0	1607.0	21.0	2255	21	2255.0	21.0	28.7	Core
12WPY56_21	533.00	1.62	1.58800	0.02400	0.15950	0.00200	0.74494	964.8	9.3	954.0	11.0	987	14	954.0	11.0	1.1	Single Age
12WPY56_22	147.90	0.88	0.88080	0.00860	0.10440	0.00120	0.69367	641.8	4.6	639.9	7.1	648	9	639.9	7.1	0.3	Single Age
12WPY56_23	419.00	3.06	1.50800	0.03300	0.15410	0.00350	0.82008	934.0	13.0	923.0	20.0	961	17	923.0	20.0	1.2	Single Age
12WPY56_24	109.60	0.74	5.25600	0.07000	0.31920	0.00380	0.79513	1861.0	11.0	1788.0	19.0	1952	9	1951.8	9.4	8.4	Single Age
12WPY56_25	179.90	1.01	1.80200	0.01800	0.17630	0.00180	0.66980	1046.5	6.7	1048.9	9.9	1048	11	1048.9	9.9	0.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY56_26	48.90	0.34	5.34700	0.06700	0.34170	0.00430	0.74412	1878.0	10.0	1894.0	20.0	1854	10	1854.0	10.0	2.2	Single Age
12WPY56_28	78.10	0.76	1.56000	0.02100	0.15210	0.00200	0.55579	954.8	8.2	914.0	11.0	1062	20	914.0	11.0	4.3	Single Age
12WPY56_29	296.00	2.20	2.58400	0.07800	0.21000	0.00600	0.92504	1294.0	22.0	1228.0	32.0	1401	14	1401.0	14.0	12.3	Single Age
12WPY56_30	138.00	0.31	13.41000	0.12000	0.54030	0.00630	0.82277	2708.2	8.5	2784.0	26.0	2643	7	2643.3	7.4	5.3	Single Age
12WPY56_31	290.00	1.36	5.61900	0.08100	0.34070	0.00490	0.83841	1918.0	13.0	1889.0	23.0	1933	17	1933.0	17.0	2.3	Single Age
12WPY56_32	252.00	1.21	1.71400	0.03200	0.16820	0.00250	0.54552	1013.0	12.0	1002.0	14.0	1038	26	1002.0	14.0	1.1	Single Age
12WPY56_33	195.60	1.41	1.64700	0.02400	0.16510	0.00220	0.69931	987.7	9.2	985.0	12.0	988	18	985.0	12.0	0.3	Single Age
12WPY56_34	153.70	1.96	0.85980	0.00930	0.10287	0.00083	0.50367	629.8	5.1	631.2	4.9	626	13	631.2	4.9	0.2	Single Age
12WPY56_35	399.00	4.66	5.55900	0.06500	0.33820	0.00420	0.74825	1909.0	10.0	1878.0	20.0	1950	6	1949.8	6.3	3.7	Single Age
12WPY56_37	288.00	38.00	0.75400	0.02100	0.09490	0.00260	0.74452	570.0	12.0	584.0	15.0	566	33	584.0	15.0	2.5	Single Age
12WPY56_38	139.90	1.76	4.31400	0.08300	0.28990	0.00450	0.81357	1695.0	16.0	1641.0	22.0	1753	14	1753.0	14.0	6.4	Single Age
12WPY56_39	638.00	13.91	0.81400	0.01800	0.09670	0.00290	0.63797	604.5	9.9	595.0	17.0	661	14	595.0	17.0	1.6	Rim
12WPY56_39	281.00	3.02	1.66800	0.01900	0.16470	0.00230	0.72596	996.1	7.3	983.0	13.0	1019	11	983.0	13.0	1.3	Core
12WPY56_40	175.00	5.40	12.42000	0.46000	0.50500	0.01700	0.98902	2624.0	41.0	2627.0	78.0	2628	12	2628.0	12.0	0.0	Single Age
12WPY56_42	281.00	1.42	1.06400	0.01500	0.12140	0.00180	0.81366	735.1	7.4	738.0	10.0	723	12	738.0	10.0	0.4	Single Age
12WPY56_43	394.00	1.33	0.86200	0.01400	0.10250	0.00160	0.93082	630.6	7.7	629.2	9.6	636	10	629.2	9.6	0.2	Single Age
12WPY56_44	114.60	0.72	1.41600	0.03100	0.14200	0.00310	0.79033	895.0	13.0	856.0	18.0	981	15	856.0	18.0	4.4	Single Age
12WPY56_45	47.71	0.96	1.76000	0.02400	0.17000	0.00190	0.51029	1030.3	8.7	1012.0	10.0	1067	11	1012.0	10.0	1.8	Single Age
12WPY56_46	159.00	1.24	0.86900	0.02200	0.09830	0.00130	0.39956	634.0	12.0	604.1	7.8	731	41	604.1	7.8	4.7	Single Age
12WPY56_47	201.00	0.83	5.49400	0.08400	0.32630	0.00620	0.86276	1898.0	13.0	1824.0	31.0	1980	12	1980.0	12.0	7.9	Single Age
12WPY56_48	282.60	0.73	1.42800	0.01200	0.14620	0.00140	0.57713	901.4	5.0	879.3	8.1	950	12	879.3	8.1	2.5	Single Age
12WPY56_49	134.00	0.53	1.67500	0.02000	0.16550	0.00210	0.78355	998.6	7.6	987.0	11.0	1025	9	987.0	11.0	1.2	Single Age
12WPY56_50	68.60	3.02	0.89400	0.01500	0.10330	0.00590	0.11613	648.2	7.9	633.0	35.0	716	81	633.0	35.0	2.3	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY56_50	61.10	4.51	1.62100	0.02100	0.16240	0.00240	0.58725	978.0	8.3	970.0	13.0	989	11	970.0	13.0	0.8	Core
12WPY56_51	174.80	5.69	0.92250	0.00820	0.10740	0.00110	0.57778	663.5	4.3	657.5	6.2	687	12	657.5	6.2	0.9	Single Age
12WPY56_52	629.00	0.39	8.99000	0.17000	0.40030	0.00570	0.76090	2337.0	17.0	2170.0	26.0	2496	16	2496.0	16.0	13.1	Single Age
12WPY56_53	612.00	57.20	0.82700	0.02300	0.09730	0.00290	0.75072	611.0	13.0	601.0	16.0	686	33	601.0	16.0	1.6	Single Age
12WPY56_54	466.00	2.38	7.79000	0.28000	0.34000	0.01300	0.95720	2201.0	33.0	1883.0	61.0	2506	12	2506.0	12.0	24.9	Single Age
12WPY56_56	261.10	0.95	1.64500	0.01500	0.16630	0.00170	0.61117	987.4	5.6	991.8	9.5	979	11	991.8	9.5	0.4	Single Age
12WPY56_57	323.60	1.05	0.91300	0.01100	0.10710	0.00170	0.64816	659.3	6.2	656.1	9.6	681	19	656.1	9.6	0.5	Single Age
12WPY56_59	363.00	4.79	1.51600	0.01600	0.15400	0.00170	0.60669	936.7	6.4	923.4	9.4	965	14	923.4	9.4	1.4	Single Age
12WPY56_60	157.10	0.76	1.77200	0.02200	0.17740	0.00260	0.77662	1034.8	7.8	1053.0	14.0	1008	12	1053.0	14.0	1.8	Single Age
12WPY56_61	62.50	0.94	1.91000	0.04700	0.18240	0.00420	0.77240	1084.0	16.0	1080.0	23.0	1089	23	1080.0	23.0	0.4	Single Age
12WPY56_62	156.60	1.17	1.49000	0.02000	0.14820	0.00160	0.40373	925.7	8.3	890.6	9.2	996	15	890.6	9.2	3.8	Single Age
12WPY56_63	187.00	1.32	1.01900	0.04500	0.11620	0.00520	0.89234	712.0	23.0	708.0	30.0	732	33	708.0	30.0	0.6	Rim
12WPY56_63	140.50	0.86	1.58900	0.02500	0.15880	0.00270	0.65095	965.0	10.0	950.0	15.0	981	21	950.0	15.0	1.6	Core
12WPY56_64	421.00	1.11	1.51800	0.02700	0.15390	0.00320	0.93445	937.0	11.0	922.0	18.0	969	11	922.0	18.0	1.6	Single Age
12WPY56_65	271.00	1.06	5.64800	0.04800	0.32250	0.00360	0.71623	1923.0	7.4	1802.0	18.0	2055	8	2055.1	8.2	12.3	Single Age
12WPY56_66	217.00	1.82	1.73400	0.03100	0.17110	0.00300	0.75664	1021.0	11.0	1018.0	17.0	1033	15	1018.0	17.0	0.3	Single Age
12WPY56_67	149.00	0.89	1.56200	0.01400	0.16090	0.00140	0.50043	955.2	5.5	961.6	8.0	942	13	961.6	8.0	0.7	Single Age
12WPY56_68	120.70	1.30	1.11600	0.02200	0.12580	0.00180	0.57773	762.0	10.0	764.0	10.0	756	18	764.0	10.0	0.3	Single Age
12WPY56_69	275.40	1.95	0.94900	0.01600	0.10950	0.00180	0.73269	677.8	8.1	669.0	10.0	686	18	669.0	10.0	1.3	Single Age
12WPY56_70	112.20	0.50	5.39600	0.07700	0.33900	0.00530	0.63095	1884.0	12.0	1881.0	26.0	1892	15	1892.0	15.0	0.6	Single Age
12WPY56_71	204.10	2.33	1.02700	0.01300	0.11940	0.00170	0.64067	716.9	6.5	726.8	9.6	675	17	726.8	9.6	1.4	Single Age
12WPY56_72	515.00	0.88	0.87230	0.00780	0.10430	0.00110	0.83894	637.3	4.1	639.4	6.2	626	7	639.4	6.2	0.3	Single Age
12WPY56_73	164.50	0.81	1.81400	0.02000	0.17780	0.00190	0.08289	1050.0	7.1	1055.0	10.0	1034	16	1055.0	10.0	0.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY56_74	154.00	0.94	2.45400	0.02600	0.21020	0.00210	0.73757	1258.0	7.7	1230.0	11.0	1303	10	1302.9	9.6	5.6	Single Age
12WPY56_75	511.00	1.71	0.82000	0.01200	0.09750	0.00190	0.85504	607.9	6.7	599.0	11.0	641	10	599.0	11.0	1.5	Single Age
12WPY56_78	526.00	2.38	1.25400	0.03500	0.13200	0.00380	0.84431	825.0	16.0	799.0	22.0	876	40	799.0	22.0	3.2	Rim
12WPY56_78	354.00	0.89	1.60000	0.01300	0.16210	0.00160	0.72294	969.9	4.9	968.4	8.8	973	8	968.4	8.8	0.2	Core
12WPY56_79	844.00	1.88	0.72700	0.01400	0.08560	0.00140	0.70443	554.2	8.5	529.5	8.4	659	20	529.5	8.4	4.5	Single Age
12WPY56_80	269.00	4.48	0.89970	0.00880	0.10705	0.00097	0.78642	651.4	4.7	655.5	5.6	641	9	655.5	5.6	0.6	Single Age
12WPY56_81	41.90	0.32	1.70100	0.03100	0.16570	0.00270	0.49030	1008.0	12.0	988.0	15.0	1039	17	988.0	15.0	2.0	Single Age
12WPY56_82	268.60	3.23	0.86560	0.00960	0.10217	0.00095	0.31828	633.0	5.2	627.1	5.6	653	13	627.1	5.6	0.9	Single Age
12WPY56_83	17.40	0.29	0.76300	0.04600	0.09480	0.00340	0.11394	573.0	26.0	583.0	20.0	557	53	583.0	20.0	1.7	Rim
12WPY56_83	45.30	0.57	1.24600	0.02500	0.12970	0.00220	0.63531	823.0	12.0	786.0	12.0	920	21	786.0	12.0	4.5	Core
12WPY56_84	217.00	0.44	1.49600	0.01800	0.15050	0.00150	0.67491	928.4	7.4	903.9	8.3	988	11	903.9	8.3	2.6	Single Age
12WPY56_85	211.00	0.83	4.97300	0.06400	0.32290	0.00300	0.72240	1814.0	11.0	1803.0	14.0	1835	13	1835.0	13.0	1.7	Single Age
12WPY56_86	354.00	3.14	4.76000	0.10000	0.31590	0.00560	0.79915	1777.0	18.0	1769.0	28.0	1769	18	1769.0	18.0	0.0	Single Age
12WPY56_87	163.00	1.03	5.30700	0.04400	0.33640	0.00290	0.84290	1869.6	7.1	1869.0	14.0	1871	6	1871.1	6.2	0.1	Single Age
12WPY56_88	224.90	1.45	1.70500	0.01700	0.16880	0.00190	0.66361	1010.7	6.1	1007.0	11.0	1018	10	1007.0	11.0	0.4	Single Age
12WPY56_89	9.66	1.70	0.94700	0.03300	0.11260	0.00280	0.22601	675.0	17.0	688.0	16.0	662	52	688.0	16.0	1.9	Single Age
12WPY56_90	778.00	7.67	0.81390	0.00980	0.09420	0.00130	0.89920	604.4	5.4	580.0	7.5	705	9	580.0	7.5	4.0	Single Age
12WPY56_91	236.00	1.14	0.75100	0.00750	0.09246	0.00089	0.62756	568.6	4.3	570.0	5.3	574	11	570.0	5.3	0.2	Single Age
12WPY56_92	173.00	1.56	9.64000	0.14000	0.40400	0.00570	0.80200	2400.0	13.0	2187.0	26.0	2580	9	2579.9	8.9	15.2	Single Age
12WPY56_93	167.40	1.16	1.12700	0.01900	0.12080	0.00220	0.52364	766.1	8.8	735.0	12.0	866	21	735.0	12.0	4.1	Rim
12WPY56_93	256.40	0.62	1.29200	0.01600	0.13290	0.00210	0.64893	842.0	6.9	805.0	12.0	963	15	805.0	12.0	4.4	Core
12WPY56_94	580.00	0.36	0.75270	0.00910	0.08688	0.00098	0.77775	569.5	5.3	537.0	5.8	706	12	537.0	5.8	5.7	Single Age
12WPY56_95	102.00	1.28	1.18200	0.01300	0.13180	0.00140	0.44275	792.0	6.2	798.3	8.0	765	14	798.3	8.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY56_97	245.10	0.89	0.84420	0.00880	0.10051	0.00097	0.54051	621.3	4.8	617.3	5.7	635	12	617.3	5.7	0.6	Single Age
12WPY56_99	36.80	0.71	1.65300	0.02700	0.16560	0.00240	0.59418	990.0	10.0	988.0	13.0	979	15	988.0	13.0	0.2	Single Age
12WPY56_100	61.10	1.87	0.73700	0.01300	0.08660	0.00130	0.40012	559.9	7.8	535.5	7.7	658	19	535.5	7.7	4.4	Single Age
12WPY56_101	312.00	0.74	1.22700	0.01800	0.13240	0.00200	0.70504	812.6	8.1	801.0	11.0	853	20	801.0	11.0	1.4	Single Age
12WPY56_102	1078.00	6.10	0.65890	0.00470	0.08075	0.00057	0.52246	515.0	3.1	500.6	3.4	582	9	500.6	3.4	2.8	Single Age
12WPY56_103	160.70	0.92	1.78000	0.01700	0.17480	0.00200	0.60873	1037.7	6.3	1038.0	11.0	1041	12	1038.0	11.0	0.0	Single Age
12WPY56_104	206.00	0.74	1.77700	0.02900	0.16780	0.00170	0.50835	1036.0	11.0	1000.0	9.3	1123	25	1000.0	9.3	3.5	Single Age
12WPY56_105	32.50	0.25	1.59500	0.02500	0.16220	0.00230	0.60613	967.4	9.8	969.0	13.0	964	17	969.0	13.0	0.2	Single Age
12WPY56_106	209.70	1.10	1.11800	0.02900	0.12650	0.00350	0.91873	765.0	15.0	768.0	20.0	753	12	768.0	20.0	0.4	Single Age
12WPY56_107	315.00	27.90	0.82500	0.01200	0.10020	0.00190	0.63914	610.9	6.9	616.0	11.0	601	20	616.0	11.0	0.8	Single Age
12WPY56_108	205.00	0.48	11.53000	0.14000	0.46290	0.00590	0.87860	2566.0	11.0	2455.0	27.0	2644	7	2643.7	6.5	7.1	Single Age
12WPY56_109	276.00	3.75	1.01300	0.01500	0.11700	0.00150	0.77086	710.2	7.7	713.3	8.4	710	18	713.3	8.4	0.4	Single Age
12WPY56_110	143.50	1.08	2.04700	0.02000	0.19410	0.00230	0.68043	1130.8	6.6	1144.0	12.0	1097	10	1144.0	12.0	1.2	Single Age
12WPY56_111	269.70	1.73	6.23000	0.19000	0.25340	0.00710	0.97057	2015.0	26.0	1455.0	37.0	2643	10	DISC	DISC	44.9	Single Age
12WPY56_112	242.30	0.32	1.58300	0.02600	0.16280	0.00220	0.72525	964.5	9.9	972.0	12.0	951	17	972.0	12.0	0.8	Single Age
12WPY56_113	52.70	0.71	0.44100	0.01300	0.05750	0.00130	0.57716	370.3	9.1	360.3	8.0	459	32	360.3	8.0	2.7	Single Age
12WPY56_114	80.40	1.01	1.27100	0.01800	0.13750	0.00190	0.42981	834.6	8.3	830.0	11.0	860	21	830.0	11.0	0.6	Single Age
12WPY56_115	183.00	48.90	0.81130	0.00870	0.09970	0.00110	0.60118	603.6	4.8	612.6	6.2	567	12	612.6	6.2	1.5	Single Age
12WPY56_116	84.20	0.99	1.31000	0.01600	0.13920	0.00130	0.41500	851.0	7.1	839.9	7.4	861	15	839.9	7.4	1.3	Single Age
12WPY56_117	182.70	0.52	6.07300	0.06600	0.36110	0.00370	0.63495	1986.9	9.7	1987.0	17.0	1983	10	1983.0	10.0	0.2	Single Age
12WPY56_118	265.00	1.51	1.66700	0.01700	0.16590	0.00180	0.81641	996.6	6.5	989.5	9.9	1002	9	989.5	9.9	0.7	Single Age
12WPY56_119	165.30	1.09	12.23000	0.14000	0.48930	0.00590	0.87435	2621.0	11.0	2570.0	26.0	2654	6	2653.8	5.6	3.2	Single Age
12WPY56_120	201.60	1.07	0.81760	0.00910	0.09902	0.00093	0.45689	606.4	5.1	608.6	5.4	604	14	608.6	5.4	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY56_121	321.00	0.82	11.65000	0.16000	0.47810	0.00550	0.88689	2575.0	13.0	2518.0	24.0	2620	7	2620.1	7.4	3.9	Single Age
12WPY56_122	187.00	0.78	0.81200	0.01200	0.09860	0.00200	0.67999	603.3	6.9	606.0	12.0	593	16	606.0	12.0	0.4	Single Age
12WPY56_123	48.60	1.39	1.79400	0.03000	0.17330	0.00250	0.73405	1044.0	11.0	1030.0	14.0	1070	21	1030.0	14.0	1.3	Single Age
12WPY56_124	339.00	0.45	0.83800	0.01500	0.09890	0.00190	0.90843	617.5	8.3	608.0	11.0	656	9	608.0	11.0	1.5	Single Age

Devonian strata U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_1	28.10	1.98	0.93000	0.01400	0.10970	0.00130	0.28222	667.1	7.5	670.8	7.7	641	34	670.8	7.7	0.6	Single Age
12WPY06_2	237.00	0.55	5.30300	0.05400	0.33490	0.00350	0.81787	1868.7	8.7	1862.0	17.0	1880	10	1880.0	10.0	1.0	Single Age
12WPY06_3	77.10	0.98	1.41900	0.02600	0.14980	0.00140	0.30172	896.0	11.0	899.9	7.9	884	35	899.9	7.9	0.4	Single Age
12WPY06_4	264.00	2.28	4.34000	0.25000	0.22310	0.00910	0.98110	1679.0	47.0	1295.0	47.0	2208	33	DISC	DISC	41.3	Single Age
12WPY06_5	476.00	9.90	1.16900	0.02800	0.11620	0.00230	0.94126	784.0	13.0	708.0	13.0	983	20	708.0	13.0	9.7	Single Age
12WPY06_6	10.10	0.06	9.00000	1.60000	0.19200	0.02300	0.94669	2130.0	160.0	1090.0	110.0	3540	150	DISC	DISC	48.8	Single Age
12WPY06_7	768.00	4.10	0.70820	0.00710	0.08526	0.00084	0.80727	543.5	4.2	527.4	5.0	606	14	527.4	5.0	3.0	Single Age
12WPY06_8	189.60	0.91	0.80200	0.01000	0.09581	0.00081	0.42757	598.6	5.7	589.8	4.8	624	25	589.8	4.8	1.5	Single Age
12WPY06_9	250.00	1.14	0.80900	0.02300	0.09600	0.00300	0.96563	600.0	13.0	591.0	18.0	643	23	591.0	18.0	1.5	Single Age
12WPY06_10	164.00	3.11	8.76000	0.41000	0.37500	0.01400	0.96861	2317.0	41.0	2046.0	68.0	2540	27	2540.0	27.0	19.4	Single Age
12WPY06_11	215.60	0.69	9.85000	0.36000	0.42300	0.01300	0.98119	2418.0	34.0	2268.0	59.0	2558	13	2558.0	13.0	11.3	Single Age
12WPY06_12	1187.00	35.90	0.81400	0.02400	0.09690	0.00310	0.76251	604.0	14.0	596.0	18.0	642	27	596.0	18.0	1.3	Rim
12WPY06_12	143.00	1.74	1.29700	0.02400	0.14240	0.00240	0.76077	844.0	11.0	858.0	14.0	809	37	858.0	14.0	1.7	Core
12WPY06_13	358.00	1.11	13.37000	0.18000	0.53770	0.00550	0.80922	2706.0	13.0	2776.0	24.0	2662	12	2662.0	12.0	4.3	Single Age
12WPY06_14	29.84	0.86	1.52400	0.02300	0.15640	0.00230	0.70737	940.3	9.2	938.0	13.0	955	24	938.0	13.0	0.2	Single Age
12WPY06_15	378.00	3.36	1.17000	0.04300	0.13110	0.00410	0.96205	785.0	20.0	793.0	23.0	743	20	793.0	23.0	1.0	Single Age
12WPY06_16	1560.00	19.00	0.67600	0.01700	0.07960	0.00290	0.74664	524.0	10.0	494.0	17.0	670	54	494.0	17.0	5.7	Rim
12WPY06_16	164.10	2.55	1.18400	0.01900	0.12700	0.00220	0.63926	792.9	8.9	771.0	13.0	860	23	771.0	13.0	2.8	Core
12WPY06_17	206.00	0.93	0.77720	0.00970	0.09200	0.00110	0.72455	583.6	5.6	567.4	6.7	629	21	567.4	6.7	2.8	Single Age
12WPY06_18	402.00	1.48	0.81690	0.00970	0.09770	0.00130	0.80591	606.0	5.4	600.5	7.4	637	17	600.5	7.4	0.9	Single Age
12WPY06_19	509.00	52.00	0.74400	0.01700	0.08790	0.00190	0.65949	564.3	9.9	543.0	11.0	647	38	543.0	11.0	3.8	Rim
12WPY06_19	174.00	1.31	2.95700	0.05300	0.21090	0.00360	0.83449	1399.0	15.0	1234.0	19.0	1653	22	1653.0	22.0	25.3	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_20	97.60	1.20	9.68000	0.38000	0.41000	0.01500	0.98559	2395.0	41.0	2211.0	70.0	2567	18	2567.0	18.0	13.9	Single Age
12WPY06_21	207.00	0.48	6.62400	0.07700	0.38260	0.00410	0.82504	2062.0	10.0	2088.0	19.0	2038	12	2038.0	12.0	2.5	Single Age
12WPY06_22	395.00	0.68	1.38100	0.03000	0.14110	0.00260	0.85589	879.0	13.0	851.0	15.0	970	21	851.0	15.0	3.2	Single Age
12WPY06_23	66.10	2.90	1.55600	0.07500	0.14310	0.00330	0.71084	952.0	29.0	862.0	19.0	1190	99	862.0	19.0	9.5	Rim
12WPY06_23	194.60	0.56	5.82200	0.06600	0.34400	0.00500	0.81145	1949.0	9.9	1905.0	24.0	1995	19	1995.0	19.0	4.5	Core
12WPY06_24	1088.00	12.23	0.76950	0.00810	0.09000	0.00100	0.69496	579.9	4.8	555.8	5.9	676	17	555.8	5.9	4.2	Single Age
12WPY06_25	1371.00	1.89	1.94000	0.13000	0.12600	0.00310	0.64184	1090.0	46.0	765.0	18.0	1800	110	DISC	DISC	29.8	Rim
12WPY06_25	722.00	0.83	8.47000	0.15000	0.42390	0.00850	0.88628	2281.0	17.0	2277.0	39.0	2286	16	2286.0	16.0	0.4	Core
12WPY06_26	492.00	2.60	0.93800	0.01900	0.11010	0.00240	0.81286	675.0	11.0	673.0	14.0	702	32	673.0	14.0	0.3	Single Age
12WPY06_27	1200.00	11.40	0.78900	0.03300	0.09040	0.00240	0.92025	590.0	19.0	558.0	14.0	730	42	558.0	14.0	5.4	Rim
12WPY06_27	180.90	1.04	1.50100	0.02000	0.15690	0.00240	0.82366	930.4	8.1	939.0	14.0	904	19	939.0	14.0	0.9	Core
12WPY06_28	308.00	17.80	0.86000	0.02600	0.10340	0.00220	0.67504	630.0	14.0	634.0	13.0	622	49	634.0	13.0	0.6	Rim
12WPY06_28	266.00	1.13	1.12700	0.01200	0.12620	0.00140	0.66854	766.2	5.5	765.9	8.2	774	18	765.9	8.2	0.0	Core
12WPY06_29	29.70	0.88	5.89000	0.32000	0.35400	0.01400	0.93824	1936.0	50.0	1956.0	67.0	1931	37	1931.0	37.0	1.3	Single Age
12WPY06_30	345.30	1.82	11.36000	0.11000	0.46320	0.00420	0.84619	2552.2	8.7	2453.0	18.0	2633.7	8.4	2633.7	8.4	6.9	Single Age
12WPY06_31	345.00	1.36	10.35000	0.16000	0.43310	0.00660	0.91194	2465.0	15.0	2323.0	29.0	2584	12	2584.0	12.0	10.1	Single Age
12WPY06_32	109.80	1.90	2.68100	0.08300	0.20950	0.00580	0.79438	1320.0	23.0	1225.0	31.0	1494	34	1494.0	34.0	18.0	Single Age
12WPY06_33	225.00	0.75	0.89900	0.03300	0.10040	0.00140	0.80619	649.0	16.0	616.6	7.9	738	42	616.6	7.9	5.0	Single Age
12WPY06_34	263.00	1.51	0.74500	0.01100	0.09200	0.00140	0.76786	564.7	6.1	567.1	8.0	562	21	567.1	8.0	0.4	Single Age
12WPY06_35	272.00	3.34	1.21300	0.01500	0.13360	0.00180	0.80501	806.1	6.9	808.0	10.0	810	16	808.0	10.0	0.2	Single Age
12WPY06_36	54.80	1.44	1.23100	0.02500	0.13060	0.00220	0.61156	815.0	12.0	795.0	13.0	859	34	795.0	13.0	2.5	Single Age
12WPY06_37	258.40	2.55	1.85100	0.01500	0.18190	0.00170	0.72561	1063.4	5.5	1077.4	9.1	1035	14	1077.4	9.1	1.3	Single Age
12WPY06_38	409.00	142.00	1.08800	0.03300	0.12200	0.00340	0.57273	747.0	16.0	742.0	20.0	783	38	742.0	20.0	0.7	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_38	125.80	0.59	1.83000	0.03400	0.18370	0.00310	0.84860	1057.0	13.0	1089.0	16.0	990	22	1089.0	16.0	3.0	Core
12WPY06_39	152.60	1.20	6.13000	0.33000	0.28500	0.01200	0.98270	1975.0	46.0	1617.0	61.0	2395	24	DISC	DISC	32.5	Single Age
12WPY06_40	205.20	1.52	4.96000	0.20000	0.23780	0.00700	0.94096	1806.0	35.0	1374.0	36.0	2365	27	DISC	DISC	41.9	Single Age
12WPY06_41	144.00	2.70	1.59300	0.01800	0.16080	0.00190	0.70281	968.2	6.9	961.0	10.0	992	20	961.0	10.0	0.7	Single Age
12WPY06_42	169.40	0.85	5.64500	0.05900	0.34130	0.00450	0.70765	1922.6	9.1	1892.0	22.0	1963	16	1963.0	16.0	3.6	Single Age
12WPY06_43	73.30	1.09	1.25400	0.01800	0.13660	0.00170	0.45173	826.2	7.8	825.2	9.9	799	32	825.2	9.9	0.1	Single Age
12WPY06_44	512.00	2.66	2.26000	0.12000	0.19220	0.00710	0.31731	1198.0	36.0	1133.0	38.0	1288	97	1133.0	38.0	5.4	Rim
12WPY06_44	294.80	0.86	2.99500	0.02800	0.25010	0.00280	0.75697	1407.1	7.6	1439.0	15.0	1367	16	1367.0	16.0	5.3	Core
12WPY06_45	233.80	1.28	1.02830	0.00960	0.11990	0.00120	0.47725	717.9	4.8	730.9	6.7	691	20	730.9	6.7	1.8	Single Age
12WPY06_46	156.60	1.44	11.76000	0.11000	0.48200	0.00470	0.84990	2585.1	8.6	2535.0	21.0	2624	10	2624.0	10.0	3.4	Single Age
12WPY06_47	165.50	0.82	9.16000	0.16000	0.41780	0.00500	0.77011	2355.0	15.0	2250.0	23.0	2435	17	2435.0	17.0	7.6	Single Age
12WPY06_48	214.00	1.36	6.46000	0.13000	0.33970	0.00580	0.79554	2043.0	17.0	1885.0	28.0	2213	22	2213.0	22.0	14.8	Single Age
12WPY06_49	390.00	0.40	1.50500	0.09200	0.12550	0.00190	0.32024	921.0	35.0	762.0	11.0	1310	100	DISC	DISC	17.3	Single Age
12WPY06_50	303.00	1.18	11.43000	0.21000	0.45890	0.00860	0.91409	2556.0	18.0	2433.0	38.0	2657	13	2657.0	13.0	8.4	Single Age
12WPY06_51	263.00	2.92	1.12800	0.01500	0.12500	0.00190	0.85979	766.4	7.0	759.0	11.0	792	21	759.0	11.0	1.0	Single Age
12WPY06_52	342.00	2.17	1.04600	0.03200	0.11730	0.00420	0.90130	726.0	16.0	714.0	24.0	739	32	714.0	24.0	1.7	Single Age
12WPY06_53	23.70	0.25	0.92600	0.02100	0.10980	0.00170	0.04941	665.0	11.0	671.0	10.0	630	45	671.0	10.0	0.9	Single Age
12WPY06_54	1271.00	14.90	0.66200	0.01300	0.08100	0.00170	0.82521	515.3	8.0	502.0	10.0	577	23	502.0	10.0	2.6	Single Age
12WPY06_55	274.40	0.99	1.04000	0.02600	0.11480	0.00130	0.49077	722.0	12.0	700.6	7.5	779	38	700.6	7.5	3.0	Single Age
12WPY06_56	308.00	8.41	0.88700	0.03000	0.10290	0.00270	0.83020	644.0	16.0	631.0	16.0	691	44	631.0	16.0	2.0	Rim
12WPY06_56	59.70	1.35	1.77300	0.03900	0.15640	0.00350	0.48589	1035.0	14.0	937.0	20.0	1260	50	937.0	20.0	9.5	Core
12WPY06_57	606.00	6.30	1.18000	0.17000	0.10530	0.00570	0.92611	785.0	79.0	645.0	33.0	1180	190	DISC	DISC	17.8	Rim
12WPY06_57	323.10	0.94	5.24900	0.07700	0.25260	0.00340	0.87954	1860.0	13.0	1451.0	18.0	2359	14	DISC	DISC	38.5	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_58	173.90	1.87	3.03700	0.02800	0.24320	0.00240	0.63718	1416.5	6.9	1403.0	12.0	1433	15	1433.0	15.0	2.1	Single Age
12WPY06_59	308.00	11.95	1.08100	0.06700	0.10440	0.00500	0.96866	754.0	38.0	640.0	29.0	1106	63	DISC	DISC	15.1	Rim
12WPY06_59	391.40	3.01	3.69100	0.05600	0.23160	0.00400	0.84762	1573.0	11.0	1342.0	21.0	1869	18	1869.0	18.0	28.2	Core
12WPY06_60	243.40	0.45	4.90800	0.07400	0.30390	0.00400	0.89135	1802.0	13.0	1710.0	20.0	1907	12	1907.0	12.0	10.3	Single Age
12WPY06_62	197.00	0.84	6.30000	0.09300	0.38000	0.00520	0.89323	2018.0	13.0	2076.0	24.0	1947	19	1947.0	19.0	6.6	Single Age
12WPY06_63	313.00	3.00	0.87000	0.03600	0.10440	0.00410	0.92883	634.0	20.0	640.0	24.0	615	37	640.0	24.0	0.9	Single Age
12WPY06_64	305.00	6.15	0.96100	0.01200	0.11140	0.00150	0.49859	683.2	6.3	680.8	8.7	686	17	680.8	8.7	0.4	Single Age
12WPY06_65	87.50	0.67	4.50700	0.04300	0.28530	0.00300	0.73312	1732.9	8.1	1617.0	15.0	1854	14	1854.0	14.0	12.8	Single Age
12WPY06_66	799.00	1.42	1.26500	0.01800	0.12550	0.00170	0.79830	829.6	8.1	762.2	9.8	982	18	762.2	9.8	8.1	Single Age
12WPY06_67	1056.00	3.01	1.20100	0.07300	0.10340	0.00360	0.97587	791.0	32.0	637.0	22.0	1264	49	DISC	DISC	19.5	Single Age
12WPY06_68	60.80	0.39	1.72100	0.02200	0.16870	0.00210	0.46001	1015.7	8.0	1005.0	11.0	1026	27	1005.0	11.0	1.1	Single Age
12WPY06_69	261.00	0.91	3.88000	0.12000	0.25970	0.00740	0.96694	1604.0	26.0	1487.0	38.0	1757	17	1757.0	17.0	15.4	Single Age
12WPY06_70	222.00	0.93	1.53200	0.02800	0.15460	0.00290	0.84531	943.0	11.0	926.0	16.0	963	18	926.0	16.0	1.8	Single Age
12WPY06_71	178.00	1.94	1.10100	0.01100	0.12520	0.00150	0.71025	753.7	5.5	760.3	8.8	727	16	760.3	8.8	0.9	Single Age
12WPY06_72	156.00	0.33	5.41400	0.06300	0.34120	0.00430	0.81159	1886.0	10.0	1892.0	21.0	1873	13	1873.0	13.0	1.0	Single Age
12WPY06_73	126.00	0.81	1.60700	0.02600	0.16240	0.00340	0.74030	972.0	10.0	970.0	19.0	991	29	970.0	19.0	0.2	Single Age
12WPY06_74	183.80	0.51	6.13400	0.07300	0.35540	0.00540	0.76456	1994.0	10.0	1959.0	26.0	2025	18	2025.0	18.0	3.3	Single Age
12WPY06_75	1085.00	7.11	0.60990	0.00710	0.07150	0.00110	0.69674	483.3	4.5	445.1	6.7	660	26	445.1	6.7	7.9	Single Age
12WPY06_76	659.00	2.52	0.82600	0.02000	0.09640	0.00230	0.94224	610.0	11.0	593.0	13.0	666	15	593.0	13.0	2.8	Single Age
12WPY06_77	31.50	1.31	0.91000	0.03300	0.10890	0.00270	0.38410	659.0	17.0	666.0	16.0	649	71	666.0	16.0	1.1	Rim
12WPY06_77	176.00	1.91	1.55400	0.03000	0.15500	0.00280	0.59833	952.0	12.0	929.0	16.0	999	28	929.0	16.0	2.4	Core
12WPY06_78	281.00	3.87	1.04600	0.01700	0.11630	0.00180	0.88943	726.0	8.6	709.0	11.0	778	20	709.0	11.0	2.3	Single Age
12WPY06_79	201.00	2.02	4.67000	0.14000	0.28780	0.00850	0.93703	1755.0	25.0	1628.0	42.0	1912	15	1912.0	15.0	14.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_80	591.00	1.27	0.62010	0.00610	0.07489	0.00095	0.79386	489.8	3.8	465.5	5.7	588	16	465.5	5.7	5.0	Single Age
12WPY06_81	450.00	6.45	0.76900	0.01600	0.09120	0.00200	0.91507	578.4	9.1	562.0	12.0	641	18	562.0	12.0	2.8	Single Age
12WPY06_82	95.10	1.22	0.54380	0.00770	0.07080	0.00088	0.57771	440.7	5.1	441.6	5.2	437	27	441.6	5.2	0.2	Single Age
12WPY06_83	183.00	1.08	7.24000	0.14000	0.31620	0.00390	0.84592	2139.0	17.0	1771.0	19.0	2507	17	2507.0	17.0	29.4	Single Age
12WPY06_84	295.00	1.06	12.32000	0.15000	0.50490	0.00690	0.78233	2631.0	11.0	2633.0	30.0	2623	17	2623.0	17.0	0.4	Single Age
12WPY06_85	124.00	1.33	0.91900	0.01300	0.10890	0.00180	0.62723	661.4	6.9	666.0	11.0	639	31	666.0	11.0	0.7	Single Age
12WPY06_86	47.10	0.79	2.17300	0.09600	0.18920	0.00360	0.86602	1166.0	30.0	1117.0	20.0	1262	58	1117.0	20.0	4.2	Single Age
12WPY06_87	266.00	5.50	6.83000	0.18000	0.37950	0.00830	0.88414	2094.0	23.0	2077.0	38.0	2103	20	2103.0	20.0	1.2	Single Age
12WPY06_88	79.80	1.14	3.40000	0.10000	0.23490	0.00580	0.94368	1505.0	23.0	1359.0	30.0	1714	21	1714.0	21.0	20.7	Single Age
12WPY06_89	198.00	1.69	1.05600	0.01200	0.12190	0.00160	0.67516	732.1	5.9	741.5	9.0	704	20	741.5	9.0	1.3	Single Age
12WPY06_90	1101.00	3.04	1.60700	0.03100	0.12190	0.00210	0.84186	972.0	12.0	741.0	12.0	1522	18	DISC	DISC	23.8	Single Age
12WPY06_91	211.00	0.75	1.76900	0.02900	0.17470	0.00300	0.92391	1035.0	11.0	1037.0	16.0	1031	12	1037.0	16.0	0.2	Single Age
12WPY06_92	113.40	0.77	1.02600	0.04100	0.10730	0.00160	0.65867	713.0	20.0	657.9	9.1	885	66	657.9	9.1	7.7	Single Age
12WPY06_93	166.50	0.69	11.80000	0.12000	0.49180	0.00560	0.77711	2587.5	9.4	2578.0	24.0	2591	12	2591.0	12.0	0.5	Single Age
12WPY06_94	458.00	5.69	0.99100	0.02200	0.11160	0.00210	0.52491	699.0	11.0	682.0	12.0	742	45	682.0	12.0	2.4	Rim
12WPY06_94	198.00	3.38	1.62700	0.03000	0.16610	0.00220	0.46779	980.0	12.0	991.0	12.0	949	33	991.0	12.0	1.1	Core
12WPY06_95	242.00	1.55	1.70100	0.02600	0.16900	0.00220	0.74202	1008.0	9.7	1006.0	12.0	1012	22	1006.0	12.0	0.2	Single Age
12WPY06_96	1953.00	30.00	1.38100	0.04000	0.14500	0.00380	0.32516	880.0	17.0	873.0	22.0	947	66	873.0	22.0	0.8	Rim
12WPY06_96	401.00	2.65	7.80000	0.20000	0.38700	0.01000	0.86057	2207.0	22.0	2108.0	48.0	2306	20	2306.0	20.0	8.6	Core
12WPY06_97	286.90	0.64	1.87200	0.02000	0.18110	0.00200	0.69720	1070.9	7.0	1073.0	11.0	1058	18	1073.0	11.0	0.2	Single Age
12WPY06_98	217.00	0.58	1.58700	0.02100	0.15670	0.00220	0.47645	964.6	8.3	938.0	12.0	1018	27	938.0	12.0	2.8	Single Age
12WPY06_99	162.00	1.83	12.37000	0.10000	0.50530	0.00450	0.80015	2632.2	7.8	2636.0	19.0	2632.7	9.4	2632.7	9.4	0.1	Single Age
12WPY06_100	45.40	1.04	11.64000	0.13000	0.46180	0.00600	0.79647	2575.0	11.0	2446.0	26.0	2678	12	2678.0	12.0	8.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_101	171.00	0.90	0.99480	0.00950	0.11580	0.00120	0.62767	701.6	4.7	706.3	7.1	684	19	706.3	7.1	0.7	Single Age
12WPY06_102	1240.00	40.70	0.65400	0.01500	0.08070	0.00180	0.74166	510.7	9.2	500.0	11.0	532	42	500.0	11.0	2.1	Single Age
12WPY06_103	144.10	0.42	12.46100	0.09400	0.50410	0.00530	0.76011	2639.3	7.1	2631.0	23.0	2648	12	2648.0	12.0	0.6	Single Age
12WPY06_104	55.10	1.03	1.65200	0.01800	0.16830	0.00170	0.46433	990.1	6.8	1002.4	9.5	950	22	1002.4	9.5	1.2	Single Age
12WPY06_105	219.00	10.20	0.83400	0.03600	0.10440	0.00430	0.79592	615.0	20.0	640.0	25.0	531	58	640.0	25.0	4.1	Rim
12WPY06_105	9.64	0.16	1.36000	0.03500	0.14740	0.00350	0.42732	870.0	15.0	886.0	19.0	838	59	886.0	19.0	1.8	Core
12WPY06_106	260.00	13.00	1.20000	0.18000	0.11910	0.00740	0.89269	808.0	82.0	725.0	43.0	1010	180	DISC	DISC	10.3	Rim
12WPY06_106	269.60	2.18	9.28000	0.34000	0.39900	0.01200	0.92632	2361.0	34.0	2163.0	57.0	2531	21	2531.0	21.0	14.5	Core
12WPY06_107	123.80	0.74	10.07000	0.13000	0.42730	0.00580	0.59429	2440.0	12.0	2296.0	26.0	2571	19	2571.0	19.0	10.7	Single Age
12WPY06_108	1280.00	4.81	0.67640	0.00500	0.08067	0.00075	0.68640	524.5	3.0	500.1	4.5	649	14	500.1	4.5	4.7	Single Age
12WPY06_109	71.10	0.35	5.01900	0.05400	0.32250	0.00410	0.71895	1822.0	9.1	1801.0	20.0	1848	15	1848.0	15.0	2.5	Single Age
12WPY06_110	864.00	0.80	1.13200	0.04800	0.10740	0.00180	0.32171	765.0	22.0	658.0	10.0	1044	63	DISC	DISC	14.0	Single Age
12WPY06_111	266.00	1.94	0.99700	0.05000	0.10190	0.00270	0.74510	701.0	26.0	625.0	16.0	958	77	DISC	DISC	10.8	Single Age
12WPY06_112	772.00	2.18	0.71700	0.00690	0.08523	0.00096	0.78431	548.7	4.1	527.2	5.7	631	16	527.2	5.7	3.9	Single Age
12WPY06_113	23.82	1.45	1.44800	0.02300	0.14990	0.00220	0.51652	909.6	9.7	900.0	12.0	911	33	900.0	12.0	1.1	Single Age
12WPY06_114	678.00	1.53	0.85100	0.02200	0.09450	0.00160	0.43431	624.0	12.0	582.1	9.3	793	35	582.1	9.3	6.7	Single Age
12WPY06_115	102.00	1.07	1.09200	0.02400	0.12370	0.00280	0.71498	748.0	12.0	751.0	16.0	753	31	751.0	16.0	0.4	Single Age
12WPY06_116	58.70	2.44	0.81900	0.01300	0.09810	0.00130	0.14971	607.1	7.2	603.0	7.9	622	34	603.0	7.9	0.7	Single Age
12WPY06_117	120.20	1.54	1.09800	0.03700	0.12340	0.00150	0.44153	745.0	12.0	750.0	8.8	732	41	750.0	8.8	0.7	Single Age
12WPY06_118	245.00	2.59	2.54700	0.07600	0.22130	0.00590	0.95117	1281.0	22.0	1287.0	31.0	1268	15	1268.0	15.0	1.5	Single Age
12WPY06_119	1298.00	1.00	7.38000	0.20000	0.31150	0.00780	0.49214	2164.0	26.0	1756.0	38.0	2549	33	DISC	DISC	31.1	Single Age
12WPY06_120	820.00	1.79	5.01000	0.14000	0.29020	0.00850	0.93322	1819.0	25.0	1640.0	42.0	2040	18	2040.0	18.0	19.6	Single Age
12WPY06_121	265.00	5.72	1.78100	0.01800	0.17230	0.00190	0.82860	1038.3	6.5	1024.0	11.0	1068	16	1024.0	11.0	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY06_122	50.20	0.44	1.55200	0.02600	0.15980	0.00300	0.78038	950.0	10.0	955.0	17.0	931	26	955.0	17.0	0.5	Single Age
12WPY06_123	176.00	2.30	0.93000	0.02000	0.11020	0.00210	0.65466	668.0	10.0	674.0	12.0	650	25	674.0	12.0	0.9	Single Age
12WPY06_124	128.00	12.50	1.34500	0.09200	0.11480	0.00280	0.30457	859.0	39.0	700.0	16.0	1290	130	DISC	DISC	18.5	Rim
12WPY06_124	258.80	0.55	1.68000	0.03000	0.15700	0.00330	0.78121	1000.0	11.0	944.0	17.0	1079	31	944.0	17.0	5.6	Core
12WPY38_1	122.00	0.95	1.94300	0.02700	0.19010	0.00230	0.77559	1095.4	9.3	1122.0	12.0	1034	11	1122.0	12.0	2.4	Single Age
12WPY38_2	71.00	0.75	1.51800	0.04300	0.15130	0.00390	0.86508	935.0	18.0	907.0	22.0	1012	14	907.0	22.0	3.0	Single Age
12WPY38_3	44.70	0.29	12.30000	0.17000	0.50310	0.00570	0.89298	2628.0	13.0	2626.0	24.0	2618.3	4.6	2618.3	4.6	0.3	Single Age
12WPY38_4	67.50	1.57	13.36000	0.13000	0.52670	0.00430	0.78093	2704.6	8.9	2727.0	18.0	2691.3	5.6	2691.3	5.6	1.3	Single Age
12WPY38_5	455.00	1.38	8.65100	0.06100	0.42700	0.00410	0.54608	2301.7	6.5	2294.0	19.0	2296	11	2296.0	11.0	0.1	Single Age
12WPY38_6	40.40	0.93	1.70200	0.03600	0.16800	0.00280	0.87510	1008.0	14.0	1001.0	16.0	1014	12	1001.0	16.0	0.7	Single Age
12WPY38_7	55.40	1.19	0.99300	0.01400	0.11690	0.00140	0.58087	700.0	7.2	712.4	7.8	659	14	712.4	7.8	1.8	Single Age
12WPY38_8	381.20	12.56	0.90100	0.01100	0.10960	0.00180	0.87922	652.7	6.0	670.0	10.0	597.7	7.5	670.0	10.0	2.7	Single Age
12WPY38_9	797.00	1.40	12.95000	0.14000	0.47170	0.00480	0.74494	2675.0	10.0	2491.0	21.0	2794.2	8.8	2794.2	8.8	10.9	Single Age
12WPY38_10	353.00	3.77	0.96900	0.01100	0.11260	0.00140	0.77159	687.8	5.6	687.9	8.3	662.4	9.5	687.9	8.3	0.0	Single Age
12WPY38_11	178.00	2.74	6.28100	0.06900	0.36950	0.00300	0.74853	2016.2	9.4	2027.0	14.0	1997.4	6.1	1997.4	6.1	1.5	Single Age
12WPY38_12	106.60	1.46	1.69900	0.02100	0.17050	0.00170	0.66946	1007.5	7.8	1014.8	9.4	982	11	1014.8	9.4	0.7	Single Age
12WPY38_13	155.20	0.61	1.72200	0.01900	0.16930	0.00200	0.72123	1017.1	7.1	1008.0	11.0	1015.7	9.1	1008.0	11.0	0.9	Single Age
12WPY38_14	84.70	0.49	11.58900	0.09400	0.48370	0.00330	0.44705	2571.3	7.6	2545.0	15.0	2587	5.5	2587.0	5.5	1.6	Single Age
12WPY38_15	126.00	1.58	1.50200	0.02800	0.14760	0.00210	0.38894	932.0	11.0	887.0	12.0	1010	32	887.0	12.0	4.8	Single Age
12WPY38_16	236.90	0.76	12.70300	0.09700	0.51130	0.00380	0.71847	2658.3	7.4	2662.0	16.0	2643.2	4.1	2643.2	4.1	0.7	Single Age
12WPY38_17	192.40	0.61	11.97000	0.16000	0.47880	0.00700	0.69088	2601.0	13.0	2525.0	31.0	2637	11	2637.0	11.0	4.2	Single Age
12WPY38_18	376.00	2.91	0.91900	0.01000	0.10940	0.00150	0.77893	661.8	5.4	669.0	8.8	627	11	669.0	8.8	1.1	Single Age
12WPY38_19	216.70	3.33	0.80950	0.00940	0.09835	0.00082	0.62421	602.6	5.3	604.7	4.8	583	11	604.7	4.8	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY38_20	566.00	3.66	1.02480	0.00710	0.11930	0.00110	0.59892	716.2	3.6	726.7	6.2	660.3	7.2	726.7	6.2	1.5	Single Age
12WPY38_21	280.00	0.70	1.59100	0.02000	0.16040	0.00160	0.80481	966.3	7.9	958.8	8.9	955.8	9.4	958.8	8.9	0.8	Single Age
12WPY38_22	112.30	0.79	0.84900	0.01000	0.10060	0.00130	0.44473	623.8	5.5	617.6	7.4	651	12	617.6	7.4	1.0	Single Age
12WPY38_23	276.00	1.14	10.25000	0.16000	0.42410	0.00500	0.83440	2456.0	15.0	2279.0	23.0	2595.2	7	2595.2	7.0	12.2	Single Age
12WPY38_24	690.00	14.80	1.03500	0.01700	0.11990	0.00200	0.93533	721.6	8.1	730.0	11.0	681	10	730.0	11.0	1.2	Single Age
12WPY38_25	134.00	1.40	1.84400	0.01500	0.18130	0.00160	0.58498	1060.9	5.5	1074.1	8.5	1033.8	7.9	1074.1	8.5	1.2	Single Age
12WPY38_26	373.00	1.43	1.57300	0.02000	0.15920	0.00180	0.78068	960.0	7.9	952.3	9.8	965	10	952.3	9.8	0.8	Single Age
12WPY38_27	468.00	7.50	0.98800	0.01100	0.11770	0.00130	0.74953	697.3	5.7	717.0	7.7	647.1	8.5	717.0	7.7	2.8	Single Age
12WPY38_28	374.00	1.54	0.83030	0.00630	0.10060	0.00100	0.61679	613.7	3.5	617.8	5.9	579.4	9.9	617.8	5.9	0.7	Single Age
12WPY38_29	305.00	2.92	1.27760	0.00850	0.14179	0.00094	0.24836	835.7	3.8	854.7	5.3	794.1	7.3	854.7	5.3	2.3	Single Age
12WPY38_30	1135.00	6.15	1.03400	0.01100	0.12178	0.00098	0.74211	721.4	5.6	740.7	5.6	667.7	5.6	740.7	5.6	2.7	Single Age
12WPY38_31	49.90	2.22	1.13000	0.02000	0.12510	0.00170	0.78039	767.0	9.7	760.0	10.0	783	16	760.0	10.0	0.9	Single Age
12WPY38_32	70.60	0.99	4.77000	0.05800	0.31420	0.00340	0.69198	1779.0	10.0	1761.0	17.0	1777	10	1777.0	10.0	0.9	Single Age
12WPY38_33	131.20	0.68	1.47400	0.01600	0.15000	0.00120	0.47003	919.6	6.4	901.1	6.7	948	11	901.1	6.7	2.0	Single Age
12WPY38_34	312.50	2.09	12.41000	0.19000	0.48190	0.00560	0.84039	2634.0	14.0	2535.0	24.0	2698.7	6.5	2698.7	6.5	6.1	Single Age
12WPY38_35	126.00	0.67	3.98000	0.14000	0.25900	0.00800	0.94923	1629.0	28.0	1482.0	41.0	1822	11	1822.0	11.0	18.7	Single Age
12WPY38_36	148.00	2.13	0.89190	0.00950	0.10700	0.00120	0.65188	647.2	5.1	655.1	6.9	630.4	9.6	655.1	6.9	1.2	Single Age
12WPY38_37	224.00	1.31	1.70200	0.02500	0.16840	0.00180	0.80354	1008.4	9.5	1003.0	10.0	1012.7	8.1	1003.0	10.0	0.5	Single Age
12WPY38_38	245.00	1.38	1.01000	0.01900	0.11460	0.00110	0.58970	707.8	9.7	699.6	6.5	739	19	699.6	6.5	1.2	Single Age
12WPY38_39	180.00	1.43	1.41100	0.01500	0.15200	0.00160	0.06177	893.1	6.3	911.9	8.8	828	10	911.9	8.8	2.1	Single Age
12WPY38_40	43.34	0.36	1.21400	0.01700	0.13560	0.00150	0.67960	806.6	7.9	819.8	8.4	775	14	819.8	8.4	1.6	Single Age
12WPY38_41	150.20	0.62	1.19100	0.02100	0.12930	0.00190	0.65677	795.8	9.9	784.0	11.0	801	16	784.0	11.0	1.5	Single Age
12WPY38_42	234.00	3.76	0.83600	0.01000	0.09897	0.00095	0.64254	616.8	5.5	608.3	5.6	642	11	608.3	5.6	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY38_43	335.00	5.20	1.21000	0.08800	0.13020	0.00640	0.96695	790.0	40.0	787.0	36.0	786	44	787.0	36.0	0.4	Single Age
12WPY38_44	27.10	1.07	1.42800	0.02600	0.13800	0.00180	0.24494	900.0	11.0	834.0	10.0	1051	23	834.0	10.0	7.3	Single Age
12WPY38_45	108.90	1.47	10.43000	0.22000	0.44970	0.00790	0.95125	2472.0	20.0	2393.0	35.0	2505	10	2505.0	10.0	4.5	Single Age
12WPY38_46	139.00	0.85	1.49300	0.03500	0.15320	0.00250	0.87836	927.0	14.0	918.0	14.0	940	13	918.0	14.0	1.0	Single Age
12WPY38_47	191.30	1.87	1.18290	0.00860	0.12950	0.00120	0.48957	792.5	4.0	784.9	6.6	808.3	8.9	784.9	6.6	1.0	Single Age
12WPY38_48	334.80	1.99	4.14300	0.09000	0.26580	0.00650	0.95308	1660.0	18.0	1518.0	33.0	1832.1	9.4	1832.1	9.4	17.1	Single Age
12WPY38_49	133.90	1.09	6.29700	0.05700	0.36200	0.00300	0.61656	2017.6	7.9	1991.0	14.0	2027	6.9	2027.0	6.9	1.8	Single Age
12WPY38_50	140.20	1.36	10.31000	0.16000	0.45740	0.00430	0.78550	2461.0	14.0	2428.0	19.0	2485	8	2485.0	8.0	2.3	Single Age
12WPY38_51	80.00	2.28	1.40000	0.01600	0.14240	0.00200	0.40634	888.6	6.7	858.0	11.0	967	19	858.0	11.0	3.4	Single Age
12WPY38_52	61.80	1.21	0.84900	0.01500	0.10020	0.00130	0.65409	623.6	8.1	615.6	7.8	665	15	615.6	7.8	1.3	Single Age
12WPY38_53	155.30	0.98	0.96500	0.03000	0.10020	0.00350	0.95091	687.0	16.0	615.0	20.0	943	10	DISC	DISC	10.5	Single Age
12WPY38_54	297.00	4.35	0.94200	0.01100	0.11100	0.00120	0.69320	673.9	5.6	678.5	7.0	648.7	9	678.5	7.0	0.7	Single Age
12WPY38_55	460.00	1.10	1.11800	0.01000	0.12780	0.00180	0.62020	761.9	4.8	775.0	10.0	715	13	775.0	10.0	1.7	Single Age
12WPY38_56	1065.00	7.60	3.88000	0.15000	0.21940	0.00510	0.93933	1603.0	31.0	1278.0	27.0	2045	31	DISC	DISC	37.5	Single Age
12WPY38_57	120.30	0.55	5.73800	0.08000	0.33740	0.00330	0.66324	1936.0	12.0	1874.0	16.0	1988	18	1988.0	18.0	5.7	Single Age
12WPY38_58	195.60	0.90	4.82600	0.04600	0.31780	0.00270	0.67347	1788.9	8.0	1778.0	13.0	1799.5	5.8	1799.5	5.8	1.2	Single Age
12WPY38_59	283.80	1.79	0.94460	0.00830	0.11140	0.00100	0.47886	676.3	4.4	680.8	6.0	661	10	680.8	6.0	0.7	Single Age
12WPY38_60	51.80	0.57	1.82800	0.01900	0.17730	0.00160	0.37727	1055.1	7.0	1052.3	8.8	1039	11	1052.3	8.8	0.3	Single Age
12WPY38_61	112.30	0.57	1.15600	0.01300	0.12960	0.00120	0.60250	779.7	6.2	785.3	6.7	755.8	9.6	785.3	6.7	0.7	Single Age
12WPY38_62	63.40	0.34	1.73900	0.02100	0.17220	0.00150	0.39413	1022.7	7.8	1024.4	8.4	998	14	1024.4	8.4	0.2	Single Age
12WPY38_63	307.00	2.75	0.94490	0.00870	0.11166	0.00093	0.51960	675.2	4.6	682.3	5.4	651.2	9	682.3	5.4	1.1	Single Age
12WPY38_64	249.00	3.54	1.06200	0.01100	0.12170	0.00150	0.79449	734.6	5.3	740.4	8.5	698.8	6.8	740.4	8.5	0.8	Single Age
12WPY38_65	410.00	69.00	0.92700	0.01400	0.11080	0.00160	0.48150	665.8	7.2	677.1	9.2	650	23	677.1	9.2	1.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY38_66	105.50	0.47	5.66400	0.05200	0.35640	0.00350	0.75089	1925.4	7.9	1965.0	17.0	1882.5	5.6	1882.5	5.6	4.4	Single Age
12WPY38_67	173.10	1.13	1.41800	0.01900	0.14630	0.00220	0.81994	896.0	7.9	882.0	13.0	942.6	9.2	882.0	13.0	1.6	Single Age
12WPY38_68	277.00	3.24	1.59800	0.01200	0.16290	0.00130	0.57680	969.4	4.8	972.6	7.3	950.4	6.8	972.6	7.3	0.3	Single Age
12WPY38_69	276.00	1.12	11.25000	0.10000	0.48700	0.00380	0.73008	2543.4	8.6	2557.0	16.0	2514.4	4.1	2514.4	4.1	1.7	Single Age
12WPY38_70	20.31	0.83	0.77500	0.02000	0.09170	0.00110	0.03780	581.0	11.0	565.7	6.7	630	38	565.7	6.7	2.6	Single Age
12WPY38_71	254.30	2.13	0.73880	0.00870	0.09161	0.00080	0.62233	561.4	5.1	565.0	4.7	537.1	9	565.0	4.7	0.6	Single Age
12WPY38_72	47.90	1.28	1.13100	0.01600	0.12910	0.00160	0.29429	767.6	7.8	782.8	9.1	719	18	782.8	9.1	2.0	Single Age
12WPY38_73	326.10	1.68	1.99600	0.01400	0.19210	0.00180	0.66813	1113.9	4.7	1132.8	9.6	1057.2	6.5	1132.8	9.6	1.7	Single Age
12WPY38_74	115.00	1.00	1.73900	0.02100	0.17240	0.00230	0.60667	1022.4	7.8	1027.0	13.0	1016.5	9.1	1027.0	13.0	0.4	Single Age
12WPY38_75	353.00	2.28	1.19000	0.02700	0.13310	0.00210	0.88244	794.0	13.0	807.0	12.0	744	14	807.0	12.0	1.6	Single Age
12WPY38_76	104.10	1.74	1.00580	0.00980	0.11577	0.00093	0.33637	706.5	4.9	706.1	5.4	695	12	706.1	5.4	0.1	Single Age
12WPY38_77	113.30	0.48	1.01200	0.01200	0.11780	0.00110	0.49024	709.8	5.9	717.9	6.4	666	12	717.9	6.4	1.1	Single Age
12WPY38_78	49.30	1.40	1.45100	0.02400	0.14590	0.00180	0.61304	911.0	10.0	878.0	10.0	977	17	878.0	10.0	3.6	Single Age
12WPY38_79	146.00	1.83	12.26000	0.15000	0.50280	0.00360	0.52157	2625.0	12.0	2625.0	16.0	2627.1	8.9	2627.1	8.9	0.1	Single Age
12WPY38_80	88.40	1.39	5.20000	0.06800	0.32050	0.00270	0.67448	1852.0	11.0	1792.0	13.0	1885.5	7.8	1885.5	7.8	5.0	Single Age
12WPY38_81	58.20	0.92	5.49900	0.08600	0.34450	0.00460	0.88334	1901.0	13.0	1911.0	21.0	1878	7.4	1878.0	7.4	1.8	Single Age
12WPY38_82	156.20	1.91	9.71800	0.07700	0.37720	0.00290	0.79217	2409.9	7.0	2063.0	14.0	2641.3	5.2	2641.3	5.2	21.9	Single Age
12WPY38_83	94.70	1.28	1.00200	0.01600	0.11640	0.00130	0.71395	704.1	7.9	709.9	7.2	680	13	709.9	7.2	0.8	Single Age
12WPY38_84	97.80	1.63	1.51600	0.05800	0.15630	0.00400	0.94034	940.0	23.0	935.0	22.0	941	21	935.0	22.0	0.5	Single Age
12WPY38_85	108.00	1.54	1.66200	0.08100	0.16410	0.00700	0.97382	985.0	32.0	978.0	39.0	1008	21	978.0	39.0	0.7	Single Age
12WPY38_86	40.50	1.18	0.97600	0.01700	0.11380	0.00140	0.42752	693.2	9.1	695.7	8.4	663	18	695.7	8.4	0.4	Single Age
12WPY38_87	293.00	0.22	12.91000	0.11000	0.51400	0.00460	0.57088	2674.2	8.0	2673.0	19.0	2668.4	8.7	2668.4	8.7	0.2	Single Age
12WPY38_88	611.00	9.02	0.91390	0.00850	0.11240	0.00120	0.65427	659.0	4.5	686.5	6.7	555.7	9.4	686.5	6.7	4.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY38_89	247.60	1.13	0.89900	0.00790	0.10653	0.00065	0.45663	651.0	4.2	652.6	3.8	643.8	9.8	652.6	3.8	0.2	Single Age
12WPY38_90	252.00	2.50	0.98700	0.01300	0.11450	0.00160	0.79834	696.9	6.5	698.6	9.5	666	11	698.6	9.5	0.2	Single Age
12WPY38_91	420.00	1110.00	0.95910	0.00790	0.11350	0.00140	0.76936	682.7	4.1	692.7	8.1	648.5	8	692.7	8.1	1.5	Single Age
12WPY38_92	295.00	2.43	1.42100	0.02200	0.15100	0.00200	0.86789	897.6	9.3	907.0	11.0	913.3	9	907.0	11.0	1.0	Single Age
12WPY38_93	146.00	1.31	1.57800	0.02300	0.16590	0.00240	0.76379	961.9	9.1	989.0	13.0	897.5	9.5	989.0	13.0	2.8	Single Age
12WPY38_94	152.00	3.61	1.59700	0.02000	0.16220	0.00140	0.70350	968.7	7.9	968.7	7.7	948.1	8.9	968.7	7.7	0.0	Single Age
12WPY38_95	636.00	1.46	0.81570	0.00590	0.10073	0.00072	0.59055	605.6	3.3	618.6	4.2	540.8	6.1	618.6	4.2	2.1	Single Age
12WPY38_96	112.10	0.71	1.11540	0.00940	0.12550	0.00110	0.52806	760.6	4.5	762.2	6.3	746.3	9.9	762.2	6.3	0.2	Single Age
12WPY38_97	263.00	16.50	0.95000	0.01100	0.11260	0.00110	0.68788	677.9	5.9	688.0	6.5	639	11	688.0	6.5	1.5	Single Age
12WPY38_98	70.30	1.44	4.68200	0.04700	0.31570	0.00340	0.75060	1763.4	8.4	1768.0	17.0	1745.3	5.9	1745.3	5.9	1.3	Single Age
12WPY38_99	82.40	1.06	12.48000	0.13000	0.50020	0.00530	0.89768	2643.4	9.7	2614.0	23.0	2647.7	4.6	2647.7	4.6	1.3	Single Age
12WPY38_100	76.80	0.74	0.95600	0.01700	0.11210	0.00100	0.48225	680.5	8.6	685.0	5.8	670	21	685.0	5.8	0.7	Single Age
12WPY38_101	179.00	1.29	0.93000	0.02700	0.11140	0.00140	0.61576	670.0	15.0	681.0	7.9	684	32	681.0	7.9	1.6	Single Age
12WPY38_102	109.60	0.54	1.69000	0.01800	0.16970	0.00150	0.65875	1005.3	6.7	1010.2	8.3	986	11	1010.2	8.3	0.5	Single Age
12WPY38_103	257.00	0.86	0.84260	0.00830	0.10196	0.00089	0.67477	620.4	4.5	625.9	5.2	598.6	8.4	625.9	5.2	0.9	Single Age
12WPY38_104	387.00	1.29	0.97290	0.00910	0.11560	0.00100	0.45811	689.8	4.7	705.3	6.0	633	11	705.3	6.0	2.2	Single Age
12WPY38_105	45.90	0.23	1.13900	0.01800	0.12530	0.00130	0.26650	771.6	8.4	761.2	7.4	809	20	761.2	7.4	1.3	Single Age
12WPY38_106	16.60	0.52	1.21500	0.03000	0.13570	0.00230	0.33350	809.0	13.0	822.0	12.0	735	32	822.0	12.0	1.6	Single Age
12WPY38_107	33.70	0.69	11.72800	0.09800	0.48360	0.00510	0.51158	2582.4	7.9	2542.0	22.0	2615.6	7.2	2615.6	7.2	2.8	Single Age
12WPY38_108	127.50	0.30	0.98200	0.02200	0.10049	0.00091	0.39398	693.0	11.0	617.2	5.3	957	33	DISC	DISC	10.9	Single Age
12WPY38_109	51.10	1.43	2.19800	0.02800	0.20210	0.00210	0.51058	1179.7	9.0	1187.0	11.0	1161	12	1187.0	11.0	0.6	Single Age
12WPY38_110	256.00	1.75	1.75900	0.02600	0.17580	0.00250	0.82653	1031.0	9.8	1044.0	14.0	987.5	9	1044.0	14.0	1.3	Single Age
12WPY38_111	223.70	1.84	1.03490	0.00730	0.11724	0.00096	0.36030	721.3	3.7	714.6	5.5	739.7	9.1	714.6	5.5	0.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY38_112	665.00	2.21	1.02140	0.00670	0.12011	0.00083	0.52724	714.5	3.3	731.2	4.8	659.2	6.4	731.2	4.8	2.3	Single Age
12WPY38_113	507.00	1.36	1.22160	0.00760	0.13766	0.00086	0.42950	810.4	3.5	831.4	4.9	758.5	6.5	831.4	4.9	2.6	Single Age
12WPY38_114	384.00	17.37	0.97600	0.01400	0.11860	0.00220	0.85800	691.5	7.4	723.0	13.0	657.1	7.6	723.0	13.0	4.6	Rim
12WPY38_114	355.00	1.21	1.35000	0.02000	0.14420	0.00240	0.80552	867.2	8.5	868.0	13.0	819	11	868.0	13.0	0.1	Core
12WPY38_115	285.90	2.42	1.62300	0.01400	0.16490	0.00110	0.50930	978.9	5.5	984.0	6.3	956.8	7	984.0	6.3	0.5	Single Age
12WPY38_116	226.00	0.67	1.84900	0.01700	0.18430	0.00160	0.55386	1062.6	6.0	1090.5	8.8	990	9.8	1090.5	8.8	2.6	Single Age
12WPY38_117	290.00	5.12	1.20100	0.02300	0.12820	0.00260	0.82843	800.0	10.0	777.0	15.0	843	16	777.0	15.0	2.9	Single Age
12WPY38_118	162.00	0.49	8.48000	0.23000	0.38130	0.00910	0.92979	2281.0	25.0	2081.0	43.0	2429	11	2429.0	11.0	14.3	Single Age
12WPY38_119	81.10	0.35	1.81200	0.02200	0.17900	0.00180	0.55120	1049.2	7.9	1061.4	9.9	1029	12	1061.4	9.9	1.2	Single Age
12WPY38_120	193.00	1.67	0.96500	0.01200	0.11510	0.00120	0.47961	685.5	6.3	702.1	6.8	638	14	702.1	6.8	2.4	Single Age
12WPY38_121	291.00	2.32	0.86200	0.01400	0.10640	0.00170	0.77199	630.8	7.8	651.6	9.9	577	16	651.6	9.9	3.3	Rim
12WPY38_121	181.20	1.48	1.56900	0.03000	0.15040	0.00150	0.56227	958.0	12.0	903.1	8.4	1042	22	903.1	8.4	5.7	Core
12WPY38_122	335.00	7.90	1.43600	0.03100	0.15330	0.00240	0.84522	903.0	13.0	919.0	13.0	859	16	919.0	13.0	1.8	Single Age
12WPY38_123	398.00	16.30	0.92500	0.03000	0.11390	0.00280	0.91099	664.0	16.0	695.0	16.0	622	18	695.0	16.0	4.7	Rim
12WPY38_123	108.30	0.91	1.82000	0.02000	0.17870	0.00230	0.64934	1052.6	7.3	1060.0	13.0	1001	14	1060.0	13.0	0.7	Core
12WPY38_124	54.30	5.51	0.97600	0.02400	0.11340	0.00260	0.62258	691.0	12.0	692.0	15.0	748	29	692.0	15.0	0.1	Rim
12WPY38_124	23.20	1.67	1.38400	0.03700	0.14580	0.00360	0.38828	881.0	16.0	877.0	20.0	852	34	877.0	20.0	0.5	Core
12WPY38_125	575.00	0.77	2.01200	0.01700	0.19860	0.00160	0.71538	1119.4	5.7	1167.7	8.7	1034.8	7.1	1167.7	8.7	4.3	Single Age
13WPY04_1	62.80	0.64	0.91400	0.01700	0.10620	0.00140	0.18966	659.5	8.8	650.4	7.9	672	38	650.4	7.9	1.4	Single Age
13WPY04_2	85.70	1.27	0.89800	0.01400	0.10110	0.00110	0.35888	650.2	7.7	621.0	6.5	764	31	621.0	6.5	4.5	Single Age
13WPY04_3	411.00	5.32	0.75740	0.00970	0.09190	0.00110	0.56956	572.2	5.6	566.7	6.2	590	23	566.7	6.2	1.0	Single Age
13WPY04_4	185.20	23.64	0.80900	0.01600	0.09780	0.00160	0.43770	601.7	9.1	601.3	9.3	609	37	601.3	9.3	0.1	Rim
13WPY04_4	52.20	0.99	1.50200	0.07100	0.14660	0.00410	0.48907	929.0	28.0	882.0	23.0	1031	66	882.0	23.0	5.1	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY04_5	30.02	0.40	0.83600	0.02600	0.09730	0.00180	0.03963	616.0	14.0	598.0	10.0	688	67	598.0	10.0	2.9	Single Age
13WPY04_6	20.20	0.68	0.74500	0.02500	0.09060	0.00150	0.33933	567.0	14.0	559.0	9.0	588	73	559.0	9.0	1.4	Single Age
13WPY04_7	294.00	8.96	0.86000	0.02500	0.10050	0.00220	0.84186	629.0	14.0	617.0	13.0	657	29	617.0	13.0	1.9	Single Age
13WPY04_8	118.80	1.33	1.55900	0.02100	0.15730	0.00190	0.65119	953.6	8.3	941.0	11.0	980	21	941.0	11.0	1.3	Single Age
13WPY04_9	113.60	1.01	9.14000	0.12000	0.38270	0.00450	0.80843	2350.0	12.0	2088.0	21.0	2586	13	2586.0	13.0	19.3	Single Age
13WPY04_10	358.00	1.50	0.89230	0.00880	0.10390	0.00100	0.66966	647.4	4.7	637.9	5.8	685	15	637.9	5.8	1.5	Single Age
13WPY04_11	78.30	0.33	4.90100	0.04900	0.31160	0.00310	0.53891	1801.9	8.4	1748.0	15.0	1867	17	1867.0	17.0	6.4	Single Age
13WPY04_12	792.00	5.07	7.25700	0.08500	0.37810	0.00520	0.93111	2142.0	11.0	2067.0	24.0	2212	10	2212.0	10.0	6.6	Single Age
13WPY04_13	99.30	0.85	0.92600	0.04600	0.10150	0.00150	0.62163	661.0	22.0	623.0	9.0	767	76	623.0	9.0	5.7	Single Age
13WPY04_14	445.00	2.65	0.88380	0.00870	0.10440	0.00120	0.75056	642.8	4.7	641.1	6.9	658	16	641.1	6.9	0.3	Single Age
13WPY04_15	174.70	1.14	6.82100	0.05100	0.38290	0.00320	0.67111	2088.0	6.6	2089.0	15.0	2089	11	2089.0	11.0	0.0	Single Age
13WPY04_16	329.00	2.25	0.91750	0.00900	0.10726	0.00096	0.58730	660.8	4.8	656.8	5.6	672	17	656.8	5.6	0.6	Single Age
13WPY04_17	135.20	0.18	1.49100	0.01900	0.15150	0.00190	0.59674	926.3	7.8	909.0	11.0	971	24	909.0	11.0	1.9	Single Age
13WPY04_18	119.90	1.41	1.43100	0.01900	0.14510	0.00170	0.43875	901.5	7.9	873.5	9.5	950	24	873.5	9.5	3.1	Single Age
13WPY04_19	82.40	3.88	0.68100	0.01100	0.08500	0.00110	0.39606	526.8	6.9	525.7	6.4	539	36	525.7	6.4	0.2	Single Age
13WPY04_20	626.00	5.65	0.66890	0.00680	0.08479	0.00084	0.68712	519.9	4.1	524.6	5.0	510	17	524.6	5.0	0.9	Single Age
13WPY04_21	216.00	1.69	0.75450	0.00900	0.09230	0.00110	0.71199	570.6	5.2	569.3	6.6	573	20	569.3	6.6	0.2	Single Age
13WPY04_22	443.00	2.60	0.90200	0.01300	0.10570	0.00170	0.67001	652.3	6.8	647.8	9.7	675	26	647.8	9.7	0.7	Single Age
13WPY04_23	456.00	1.66	7.28000	0.05900	0.37080	0.00370	0.79484	2145.8	7.2	2033.0	17.0	2263.6	9.9	2263.6	9.9	10.2	Single Age
13WPY04_24	308.00	2.67	0.86400	0.01200	0.10190	0.00170	0.38341	632.1	6.7	626.0	10.0	668	35	626.0	10.0	1.0	Single Age
13WPY04_25	189.00	0.60	5.04900	0.05400	0.31980	0.00390	0.78822	1826.8	9.1	1791.0	19.0	1870	13	1870.0	13.0	4.2	Single Age
13WPY04_26	93.00	0.92	1.69100	0.01800	0.16460	0.00200	0.49024	1006.8	7.3	983.0	11.0	1072	24	983.0	11.0	2.4	Single Age
13WPY04_27	402.00	2.06	0.88840	0.00810	0.10457	0.00084	0.61856	645.3	4.3	641.1	4.9	679	17	641.1	4.9	0.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY04_28	194.30	1.32	0.74680	0.00930	0.09001	0.00093	0.38757	566.8	5.2	555.5	5.5	599	28	555.5	5.5	2.0	Single Age
13WPY04_29	111.60	1.16	4.38200	0.06200	0.27700	0.00380	0.82876	1708.0	12.0	1576.0	19.0	1868	14	1868.0	14.0	15.6	Single Age
13WPY04_30	173.00	0.86	0.77100	0.01100	0.09390	0.00130	0.52035	580.2	6.1	579.6	7.8	574	27	579.6	7.8	0.1	Single Age
13WPY04_31	49.30	37.00	1.17900	0.06100	0.12880	0.00420	0.36047	786.0	28.0	785.0	23.0	806	80	785.0	23.0	0.1	Single Age
13WPY04_32	156.00	0.44	0.78600	0.01300	0.09430	0.00130	0.56873	589.2	7.6	580.7	7.9	614	31	580.7	7.9	1.4	Single Age
13WPY04_33	113.00	0.73	1.79300	0.02700	0.17140	0.00270	0.52025	1042.3	9.7	1020.0	15.0	1084	30	1020.0	15.0	2.1	Single Age
13WPY04_34	115.10	0.43	4.96900	0.04600	0.30640	0.00330	0.75171	1813.6	7.9	1722.0	16.0	1918	15	1918.0	15.0	10.2	Single Age
13WPY04_35	104.20	2.19	1.22800	0.01600	0.13290	0.00140	0.16470	813.0	7.5	804.4	7.7	827	28	804.4	7.7	1.1	Single Age
13WPY04_36	159.00	1.02	5.76700	0.07900	0.34390	0.00470	0.83187	1944.0	12.0	1905.0	23.0	1983	14	1983.0	14.0	3.9	Single Age
13WPY04_37	89.40	2.02	1.15700	0.01700	0.12770	0.00130	0.45130	781.9	7.9	774.7	7.6	780	30	774.7	7.6	0.9	Single Age
13WPY04_38	138.70	3.88	1.23000	0.04100	0.13150	0.00360	0.50180	811.0	19.0	796.0	21.0	815	33	796.0	21.0	1.8	Single Age
13WPY04_39	164.00	1.47	1.60500	0.02400	0.16060	0.00270	0.79526	972.5	9.6	960.0	15.0	1012	19	960.0	15.0	1.3	Single Age
13WPY04_40	174.20	1.07	1.68200	0.01700	0.16570	0.00130	0.92384	1001.5	6.5	988.1	7.3	1032	16	988.1	7.3	1.3	Single Age
13WPY04_41	286.00	1.30	0.95900	0.01500	0.10930	0.00100	0.61758	682.7	7.9	668.6	6.0	730	26	668.6	6.0	2.1	Single Age
13WPY04_42	151.40	0.84	10.80000	0.20000	0.44570	0.00790	0.96321	2504.0	18.0	2374.0	35.0	2611.5	8.7	2611.5	8.7	9.1	Single Age
13WPY04_43	151.60	0.28	1.69600	0.01600	0.16800	0.00140	0.53292	1006.9	6.0	1001.2	7.8	1034	19	1001.2	7.8	0.6	Single Age
13WPY04_44	141.50	0.87	1.63000	0.03100	0.15950	0.00260	0.39617	980.0	12.0	954.0	15.0	1020	29	954.0	15.0	2.7	Single Age
13WPY04_45	238.00	2.82	0.97900	0.01500	0.10920	0.00210	0.48835	692.6	7.7	668.0	12.0	769	28	668.0	12.0	3.6	Single Age
13WPY04_46	90.00	192.00	0.77800	0.03300	0.08990	0.00200	0.18790	583.0	18.0	555.0	12.0	677	65	555.0	12.0	4.8	Rim
13WPY04_46	30.80	0.42	4.34000	0.19000	0.28420	0.00910	0.91795	1699.0	36.0	1611.0	46.0	1784	43	1784.0	43.0	9.7	Core
13WPY04_47	85.00	2.54	1.65100	0.03200	0.15610	0.00240	0.14341	989.0	12.0	935.0	13.0	1118	44	935.0	13.0	5.5	Single Age
13WPY04_48	157.00	0.73	4.66000	0.11000	0.28410	0.00670	0.95234	1759.0	20.0	1610.0	34.0	1916	14	1916.0	14.0	16.0	Single Age
13WPY04_49	904.00	4.30	1.27000	0.09100	0.10500	0.00270	0.52586	832.0	42.0	643.0	16.0	1400	120	DISC	DISC	22.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY04_50	221.00	2.95	4.76000	0.11000	0.29110	0.00540	0.89706	1776.0	21.0	1646.0	27.0	1945	23	1945.0	23.0	15.4	Single Age
13WPY04_51	19.80	0.55	0.95100	0.03900	0.10650	0.00360	0.63694	675.0	20.0	652.0	21.0	771	56	652.0	21.0	3.4	Single Age
13WPY04_52	105.20	1.14	0.92200	0.01300	0.10880	0.00110	0.38313	662.7	6.6	666.9	6.7	653	30	666.9	6.7	0.6	Single Age
13WPY04_53	151.00	2.51	0.76410	0.00940	0.09275	0.00099	0.46045	576.1	5.4	571.8	5.9	590	27	571.8	5.9	0.7	Single Age
13WPY04_54	158.80	2.06	4.44000	0.13000	0.28640	0.00760	0.94329	1713.0	25.0	1621.0	38.0	1820	21	1820.0	21.0	10.9	Single Age
13WPY04_55	171.40	2.35	1.37800	0.01900	0.14070	0.00210	0.79007	879.3	8.3	848.0	12.0	934	24	848.0	12.0	3.6	Single Age
13WPY04_56	64.70	2.08	1.25000	0.01800	0.13390	0.00140	0.22180	822.9	8.1	809.7	8.0	843	31	809.7	8.0	1.6	Single Age
13WPY04_57	90.00	1.63	0.97400	0.01800	0.10970	0.00190	0.58168	689.7	9.0	671.0	11.0	742	39	671.0	11.0	2.7	Single Age
13WPY04_58	44.00	0.52	4.69000	0.05700	0.29990	0.00290	0.68548	1766.0	10.0	1690.0	14.0	1841	18	1841.0	18.0	8.2	Single Age
13WPY04_59	82.70	0.59	12.00000	0.14000	0.49210	0.00840	0.73758	2603.0	11.0	2578.0	36.0	2624	19	2624.0	19.0	1.8	Single Age
13WPY04_60	297.90	1.01	0.89000	0.01200	0.10100	0.00130	0.42478	645.8	6.5	620.5	7.4	701	29	620.5	7.4	3.9	Single Age
13WPY04_61	317.00	1.25	1.66600	0.01700	0.16700	0.00170	0.65467	995.4	6.6	995.2	9.3	1001	18	995.2	9.3	0.0	Single Age
13WPY04_62	332.80	1.85	1.38500	0.03500	0.14030	0.00290	0.90232	881.0	15.0	846.0	17.0	945	25	846.0	17.0	4.0	Single Age
13WPY04_63	67.20	1.34	0.96100	0.02300	0.10970	0.00180	0.50858	684.0	12.0	671.0	10.0	727	34	671.0	10.0	1.9	Single Age
13WPY04_64	182.00	1.72	3.39600	0.02700	0.25780	0.00210	0.73009	1503.0	6.2	1480.0	11.0	1533	11	1533.0	11.0	3.5	Single Age
13WPY04_65	115.90	0.85	6.72000	0.10000	0.35130	0.00570	0.69565	2076.0	13.0	1940.0	27.0	2202	19	2202.0	19.0	11.9	Single Age
13WPY04_66	165.60	0.80	26.74000	0.26000	0.64700	0.00580	0.80041	3374.9	9.6	3216.0	23.0	3457.1	9.5	3457.1	9.5	7.0	Single Age
13WPY04_67	55.00	5.34	0.79100	0.02100	0.09020	0.00190	0.18864	591.0	12.0	557.0	11.0	745	86	557.0	11.0	5.8	Single Age
13WPY04_68	140.00	0.84	0.84000	0.01200	0.10060	0.00120	0.81808	618.5	6.7	618.1	7.0	613	26	618.1	7.0	0.1	Single Age
13WPY04_69	65.70	0.90	11.15000	0.16000	0.46810	0.00570	0.90073	2541.0	13.0	2474.0	25.0	2576	11	2576.0	11.0	4.0	Single Age
13WPY04_70	139.00	0.48	11.41000	0.11000	0.46430	0.00490	0.84658	2557.6	8.8	2458.0	21.0	2631.3	9.5	2631.3	9.5	6.6	Single Age
13WPY04_71	270.00	11.27	0.87620	0.00870	0.10260	0.00097	0.20500	638.7	4.7	629.6	5.7	658	21	629.6	5.7	1.4	Single Age
13WPY04_72	55.20	1.03	1.62900	0.03300	0.16270	0.00210	0.42803	980.0	13.0	971.0	11.0	1008	35	971.0	11.0	0.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY04_73	72.50	0.82	1.75900	0.02300	0.17000	0.00200	0.45445	1030.9	8.5	1012.0	11.0	1065	24	1012.0	11.0	1.8	Single Age
13WPY04_74	259.20	3.11	0.81200	0.01000	0.09735	0.00096	0.50241	603.0	5.7	599.6	5.5	629	22	599.6	5.5	0.6	Single Age
13WPY04_75	102.70	0.89	1.70700	0.02300	0.16790	0.00230	0.59148	1010.5	8.6	1000.0	13.0	1041	22	1000.0	13.0	1.0	Single Age
13WPY04_76	62.10	1.22	6.86000	0.13000	0.37930	0.00600	0.92650	2091.0	17.0	2072.0	28.0	2108	16	2108.0	16.0	1.7	Single Age
13WPY04_77	75.00	0.51	0.79000	0.01300	0.09470	0.00100	0.35182	590.5	7.4	583.0	5.9	617	36	583.0	5.9	1.3	Single Age
13WPY04_78	194.00	0.76	5.20700	0.03700	0.32640	0.00290	0.90197	1853.5	6.1	1820.0	14.0	1897.2	9	1897.2	9.0	4.1	Single Age
13WPY04_79	269.00	1.39	0.90600	0.01300	0.10730	0.00130	0.73582	654.7	6.8	657.0	7.4	658	22	657.0	7.4	0.4	Single Age
13WPY04_81	245.00	0.63	0.80030	0.00800	0.10000	0.00100	0.55023	596.8	4.5	614.3	6.0	539	23	614.3	6.0	2.9	Single Age
13WPY04_82	73.00	0.55	1.69500	0.02300	0.16710	0.00220	0.50587	1007.3	8.6	996.0	12.0	1010	26	996.0	12.0	1.1	Single Age
13WPY04_83	74.60	0.57	0.85000	0.01300	0.09860	0.00100	0.04401	624.1	7.4	605.9	5.9	681	40	605.9	5.9	2.9	Single Age
13WPY04_84	194.00	3.65	0.72090	0.00930	0.08890	0.00140	0.72609	551.6	5.3	548.7	8.2	568	23	548.7	8.2	0.5	Single Age
13WPY04_85	138.90	1.46	0.98200	0.01400	0.10960	0.00110	0.39576	694.0	7.1	671.1	6.5	771	28	671.1	6.5	3.3	Single Age
13WPY04_86	84.00	0.78	0.82600	0.01800	0.09810	0.00160	0.17377	611.9	9.6	603.1	9.2	619	39	603.1	9.2	1.4	Single Age
13WPY04_87	136.50	0.75	1.68000	0.01800	0.16310	0.00200	0.58818	1001.8	7.1	974.0	11.0	1055	21	974.0	11.0	2.8	Single Age
13WPY04_88	90.90	0.87	1.67900	0.02200	0.16340	0.00180	0.31847	999.9	8.3	976.0	10.0	1052	29	976.0	10.0	2.4	Single Age
13WPY04_89	30.00	0.84	1.67400	0.03700	0.16620	0.00380	0.52792	998.0	14.0	990.0	21.0	1025	49	990.0	21.0	0.8	Single Age
13WPY04_90	502.00	7.80	0.97300	0.02000	0.11030	0.00210	0.86056	690.0	10.0	674.0	12.0	725	21	674.0	12.0	2.3	Rim
13WPY04_90	76.20	1.58	1.42900	0.03600	0.14770	0.00300	0.58209	901.0	15.0	888.0	17.0	913	34	888.0	17.0	1.4	Core
13WPY04_91	200.00	1.49	5.26700	0.05600	0.31730	0.00370	0.88170	1862.9	9.0	1776.0	18.0	1961	10	1961.0	10.0	9.4	Single Age
13WPY04_92	192.10	1.41	7.93000	0.10000	0.37400	0.00590	0.80594	2222.0	12.0	2048.0	28.0	2382	16	2382.0	16.0	14.0	Single Age
13WPY04_93	630.00	30.45	0.70670	0.00740	0.08598	0.00093	0.73928	543.1	4.5	531.6	5.5	587	16	531.6	5.5	2.1	Single Age
13WPY04_94	480.00	1.43	0.97140	0.00980	0.11264	0.00093	0.73732	689.6	5.1	688.0	5.4	702	17	688.0	5.4	0.2	Single Age
13WPY04_95	219.10	1.45	0.80300	0.01200	0.09550	0.00120	0.68838	600.8	6.8	588.0	6.9	638	23	588.0	6.9	2.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY04_96	15.16	1.38	1.57600	0.05700	0.15930	0.00300	0.11305	951.0	19.0	952.0	17.0	965	66	952.0	17.0	0.1	Single Age
13WPY04_97	210.00	2.18	1.54700	0.01800	0.15880	0.00150	0.53334	949.0	7.0	950.1	8.3	940	20	950.1	8.3	0.1	Single Age
13WPY04_98	32.80	0.45	1.46800	0.03400	0.14520	0.00200	0.01169	916.0	14.0	874.0	11.0	1004	51	874.0	11.0	4.6	Single Age
13WPY04_100	215.00	1.02	10.70000	0.23000	0.43850	0.00890	0.94198	2495.0	20.0	2342.0	40.0	2609	12	2609.0	12.0	10.2	Single Age
13WPY04_101	65.40	1.16	5.92000	0.05900	0.35740	0.00430	0.84427	1963.6	8.7	1969.0	21.0	1964	13	1964.0	13.0	0.3	Single Age
13WPY04_102	57.70	0.50	1.22200	0.03600	0.12290	0.00340	0.60457	816.0	17.0	747.0	19.0	1053	48	747.0	19.0	8.5	Rim
13WPY04_102	34.80	0.77	1.80100	0.04200	0.17730	0.00360	0.62588	1045.0	15.0	1052.0	19.0	1039	42	1052.0	19.0	0.7	Core
13WPY04_103	49.20	1.59	14.49000	0.23000	0.52020	0.00740	0.83936	2781.0	15.0	2699.0	31.0	2830	20	2830.0	20.0	4.6	Single Age
13WPY04_104	196.00	1.62	1.53400	0.03000	0.15510	0.00230	0.81969	943.0	12.0	929.0	13.0	957	18	929.0	13.0	1.5	Single Age
13WPY04_105	364.00	1.56	6.27000	0.16000	0.33740	0.00800	0.96467	2020.0	21.0	1877.0	38.0	2179	10	2179.0	10.0	13.9	Single Age
13WPY04_106	63.40	1.00	1.24400	0.02300	0.13490	0.00210	0.40794	820.0	10.0	815.0	12.0	849	41	815.0	12.0	0.6	Single Age
13WPY04_107	714.00	1.64	12.50000	0.13000	0.48610	0.00630	0.85659	2642.0	10.0	2553.0	27.0	2714	10	2714.0	10.0	5.9	Single Age
13WPY04_108	96.00	0.62	3.95200	0.07600	0.26140	0.00450	0.88389	1622.0	15.0	1496.0	23.0	1807	16	1807.0	16.0	17.2	Single Age
13WPY04_109	323.00	19.50	6.29400	0.08900	0.37050	0.00780	0.71422	2017.0	12.0	2031.0	36.0	2020	17	2020.0	17.0	0.5	Rim
13WPY04_109	250.50	1.30	13.21000	0.15000	0.51370	0.00710	0.79337	2694.0	11.0	2672.0	30.0	2711	14	2711.0	14.0	1.4	Core
13WPY04_110	397.00	3.60	1.03900	0.01600	0.11750	0.00170	0.78988	723.3	7.9	717.9	9.5	748	22	717.9	9.5	0.7	Rim
13WPY04_110	99.70	0.93	1.54100	0.03900	0.16020	0.00220	0.69001	946.0	16.0	958.0	12.0	937	36	958.0	12.0	1.3	Core
13WPY04_111	127.60	0.84	0.90200	0.01100	0.10420	0.00120	0.52628	652.6	5.8	639.9	7.0	685	25	639.9	7.0	1.9	Single Age
13WPY04_112	167.00	1.18	1.41500	0.02100	0.14690	0.00220	0.88465	894.9	8.9	884.0	12.0	922	24	884.0	12.0	1.2	Single Age
13WPY04_113	33.10	0.40	1.75700	0.03700	0.17030	0.00230	0.27899	1028.0	13.0	1014.0	13.0	1045	39	1014.0	13.0	1.4	Single Age
13WPY04_114	148.50	1.54	0.99300	0.01500	0.11390	0.00170	0.73999	700.9	8.0	695.1	9.8	711	26	695.1	9.8	0.8	Single Age
13WPY04_115	77.70	0.96	7.46000	0.21000	0.33250	0.00890	0.95145	2171.0	26.0	1848.0	43.0	2478	17	2478.0	17.0	25.4	Single Age
13WPY04_116	167.00	0.72	1.83300	0.02000	0.17790	0.00180	0.61854	1056.8	7.2	1055.6	9.9	1049	17	1055.6	9.9	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY04_117	114.40	0.67	1.71300	0.01700	0.17000	0.00150	0.13299	1013.1	6.3	1012.0	8.1	1020	24	1012.0	8.1	0.1	Single Age
13WPY04_118	140.00	4.27	11.58000	0.20000	0.48970	0.00540	0.82850	2568.0	16.0	2569.0	23.0	2576	18	2576.0	18.0	0.3	Single Age
13WPY04_119	142.00	1.62	1.47300	0.02000	0.15070	0.00210	0.68196	919.0	8.4	905.0	12.0	942	17	905.0	12.0	1.5	Single Age
13WPY04_120	263.00	0.87	1.25800	0.01300	0.12940	0.00130	0.27357	827.5	6.1	784.6	7.6	952	26	784.6	7.6	5.2	Single Age
13WPY04_121	48.20	1.55	0.85800	0.01600	0.10060	0.00120	0.28912	629.3	8.7	617.6	7.3	656	43	617.6	7.3	1.9	Single Age
13WPY04_122	180.00	0.74	9.11000	0.22000	0.41000	0.00710	0.91866	2350.0	22.0	2213.0	33.0	2459	16	2459.0	16.0	10.0	Single Age
13WPY04_123	543.00	2.15	0.73360	0.00640	0.09042	0.00069	0.65048	558.5	3.8	558.0	4.1	572	15	558.0	4.1	0.1	Single Age
13WPY04_124	71.70	0.80	5.16900	0.07000	0.31140	0.00420	0.86476	1849.0	12.0	1747.0	21.0	1970	15	1970.0	15.0	11.3	Single Age

Carboniferous strata U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_1	1104.00	3.97	0.37000	0.00450	0.04893	0.00052	0.79261	319.5	3.3	307.9	3.2	416	16	307.9	3.2	3.6	Single Age
12WPY20_2	278.10	2.06	0.53240	0.00720	0.06711	0.00076	0.20901	433.2	4.8	418.7	4.6	492	25	418.7	4.6	3.3	Single Age
12WPY20_3	728.00	36.40	0.83900	0.01800	0.09960	0.00200	0.89816	621.1	8.6	612.0	12.0	639	25	612.0	12.0	1.5	Rim
12WPY20_3	524.00	21.40	4.44000	0.14000	0.27650	0.00630	0.93287	1716.0	27.0	1573.0	32.0	1900	22	1900.0	22.0	17.2	Core
12WPY20_4	805.00	1.10	0.74130	0.00630	0.08899	0.00080	0.71869	563.1	3.7	549.6	4.7	631	14	549.6	4.7	2.4	Single Age
12WPY20_5	830.00	15.00	0.86500	0.02400	0.09800	0.00150	0.77452	633.0	13.0	602.8	8.9	730	43	602.8	8.9	4.8	Rim
12WPY20_5	160.80	1.19	1.23100	0.02200	0.13410	0.00220	0.71549	814.0	10.0	811.0	13.0	825	24	811.0	13.0	0.4	Core
12WPY20_6	193.00	3.34	0.58100	0.00660	0.07442	0.00052	0.24599	464.9	4.2	462.7	3.2	468	27	462.7	3.2	0.5	Single Age
12WPY20_7	253.00	1.09	1.07020	0.00690	0.12061	0.00074	0.50883	738.7	3.4	734.1	4.3	759	13	734.1	4.3	0.6	Single Age
12WPY20_8	75.90	1.71	0.73000	0.02100	0.08830	0.00150	0.58800	556.0	12.0	545.1	9.0	588	42	545.1	9.0	2.0	Single Age
12WPY20_9	777.00	2.23	0.64540	0.00430	0.07852	0.00051	0.35430	506.0	2.7	487.3	3.1	579	16	487.3	3.1	3.7	Single Age
12WPY20_10	1140.00	14.90	0.33000	0.01300	0.04240	0.00150	0.92288	289.7	9.9	267.4	9.5	425	32	267.4	9.5	7.7	Rim
12WPY20_10	382.00	0.74	0.65700	0.01200	0.07630	0.00130	0.73548	512.3	7.2	473.7	7.7	644	27	473.7	7.7	7.5	Core
12WPY20_11	158.20	15.59	0.94400	0.01100	0.11060	0.00110	0.16896	674.7	5.9	676.4	6.2	658	27	676.4	6.2	0.3	Single Age
12WPY20_12	119.70	0.64	1.68100	0.01700	0.16690	0.00220	0.63594	1001.0	6.4	995.0	12.0	999	20	995.0	12.0	0.6	Single Age
12WPY20_13	165.00	1.10	1.40800	0.02100	0.14040	0.00220	0.91507	891.7	8.9	846.0	12.0	974	11	846.0	12.0	5.1	Single Age
12WPY20_14	244.00	2.74	0.98200	0.00800	0.11405	0.00080	0.49832	694.5	4.1	696.2	4.6	690	14	696.2	4.6	0.2	Single Age
12WPY20_15	320.00	15.00	0.94100	0.01900	0.11050	0.00240	0.54960	673.3	9.7	676.0	14.0	692	38	676.0	14.0	0.4	Rim
12WPY20_15	175.20	1.77	3.13000	0.12000	0.18680	0.00490	0.85613	1438.0	29.0	1104.0	26.0	1946	36	DISC	DISC	23.2	Core
12WPY20_16	140.70	1.32	1.13800	0.01400	0.13480	0.00140	0.54269	771.1	6.6	815.4	7.8	640	24	815.4	7.8	5.7	Single Age
12WPY20_17	56.70	277.0	0.94300	0.01300	0.11170	0.00100	0.50137	675.0	6.5	682.8	6.0	639	25	682.8	6.0	1.2	Single Age
12WPY20_18	316.00	5.75	0.70300	0.01500	0.08600	0.00130	0.89437	540.1	9.0	531.7	7.8	582	20	531.7	7.8	1.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_19	718.00	2.64	0.65150	0.00690	0.07875	0.00086	0.83847	509.2	4.2	488.6	5.1	595	12	488.6	5.1	4.0	Single Age
12WPY20_20	141.50	0.89	5.11500	0.05500	0.32110	0.00250	0.87060	1837.9	9.1	1795.0	12.0	1871	11	1871.0	11.0	4.1	Single Age
12WPY20_21	158.90	0.67	0.85870	0.00840	0.10210	0.00072	0.31106	629.2	4.6	626.7	4.2	634	25	626.7	4.2	0.4	Single Age
12WPY20_22	610.00	3.87	0.68200	0.06500	0.07600	0.00390	0.84835	525.0	39.0	478.0	21.0	770	120	478.0	21.0	9.0	Rim
12WPY20_22	322.00	2.55	6.99900	0.09000	0.30360	0.00440	0.85316	2113.0	11.0	1709.0	22.0	2524	13	DISC	DISC	32.3	Core
12WPY20_23	225.70	10.52	4.67000	0.12000	0.28870	0.00900	0.81750	1759.0	22.0	1633.0	45.0	1936	33	1936.0	33.0	15.7	Single Age
12WPY20_24	151.00	1.81	0.59190	0.00690	0.07592	0.00099	0.71532	472.4	4.5	471.7	5.9	464	22	471.7	5.9	0.1	Single Age
12WPY20_25	1240.00	3.31	0.32400	0.01100	0.04300	0.00150	0.90343	284.1	8.1	271.5	9.1	369	28	271.5	9.1	4.4	Single Age
12WPY20_26	277.70	1.65	4.76600	0.06100	0.28290	0.00360	0.89508	1778.0	11.0	1605.0	18.0	1984	17	1984.0	17.0	19.1	Single Age
12WPY20_27	146.00	2.60	0.98000	0.01700	0.11780	0.00210	0.71575	694.0	9.2	718.0	12.0	632	32	718.0	12.0	3.5	Single Age
12WPY20_28	167.00	29.20	0.89530	0.00990	0.10608	0.00089	0.48787	649.7	5.4	649.9	5.2	653	22	649.9	5.2	0.0	Single Age
12WPY20_29	267.00	3.68	0.61600	0.01500	0.07960	0.00160	0.67201	487.2	9.3	494.0	9.8	480	46	494.0	9.8	1.4	Rim
12WPY20_29	271.80	1.09	0.89100	0.01200	0.10510	0.00110	0.67692	646.9	6.3	644.1	6.4	652	20	644.1	6.4	0.4	Core
12WPY20_30	166.00	3.26	0.63050	0.00930	0.08090	0.00110	0.76656	498.8	6.0	501.6	6.7	476	23	501.6	6.7	0.6	Single Age
12WPY20_31	1462.00	51.00	0.38700	0.01600	0.05060	0.00170	0.88044	332.0	12.0	318.0	11.0	400	45	318.0	11.0	4.2	Rim
12WPY20_31	269.00	2.81	0.57170	0.00690	0.07395	0.00083	0.65510	459.0	4.4	459.9	5.0	461	21	459.9	5.0	0.2	Core
12WPY20_32	237.00	1.63	7.79000	0.13000	0.41640	0.00720	0.80315	2207.0	15.0	2243.0	33.0	2163	20	2163.0	20.0	3.7	Single Age
12WPY20_33	116.30	1.21	1.55500	0.01800	0.16000	0.00130	0.46308	953.0	7.1	956.4	7.0	933	20	956.4	7.0	0.4	Single Age
12WPY20_34	244.00	0.68	0.40410	0.00500	0.05570	0.00057	0.61761	344.5	3.6	349.4	3.5	325	23	349.4	3.5	1.4	Single Age
12WPY20_35	222.00	2.97	0.80700	0.01800	0.09850	0.00240	0.64073	603.0	11.0	606.0	14.0	571	38	606.0	14.0	0.5	Single Age
12WPY20_36	60.20	17.40	0.81400	0.01200	0.09840	0.00100	0.19567	604.5	6.5	606.3	5.8	601	34	606.3	5.8	0.3	Single Age
12WPY20_37	522.00	1.93	0.58980	0.00980	0.07490	0.00110	0.88925	470.3	6.3	465.5	6.8	491	16	465.5	6.8	1.0	Single Age
12WPY20_38	315.00	0.51	0.98650	0.00710	0.11460	0.00110	0.57142	697.4	3.8	700.0	6.4	690	17	700.0	6.4	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_39	746.00	20.70	0.87600	0.03200	0.09970	0.00300	0.93539	638.0	17.0	613.0	17.0	723	29	613.0	17.0	3.9	Rim
12WPY20_39	112.50	0.79	1.62100	0.01800	0.16560	0.00180	0.37507	978.2	7.0	988.0	9.9	975	28	988.0	9.9	1.0	Core
12WPY20_40	205.20	8.57	0.62200	0.02400	0.07820	0.00220	0.36528	491.0	15.0	485.0	13.0	511	62	485.0	13.0	1.2	Rim
12WPY20_40	442.00	2.69	3.98000	0.20000	0.23770	0.00950	0.97736	1620.0	42.0	1372.0	50.0	1968	22	DISC	DISC	30.3	Core
12WPY20_41	56.30	0.64	7.39400	0.05100	0.41040	0.00300	0.54797	2160.8	6.3	2216.0	14.0	2121	11	2121.0	11.0	4.5	Single Age
12WPY20_42	604.00	0.70	0.38850	0.00780	0.05250	0.00100	0.91927	333.0	5.7	329.9	6.2	371	15	329.9	6.2	0.9	Single Age
12WPY20_43	334.00	6.07	1.02990	0.00940	0.11600	0.00100	0.69934	718.7	4.7	707.7	5.9	761	14	707.7	5.9	1.5	Single Age
12WPY20_44	95.30	0.55	1.13600	0.01300	0.12640	0.00110	0.52661	771.2	6.0	767.1	6.2	774	23	767.1	6.2	0.5	Single Age
12WPY20_45	496.00	2.12	0.57800	0.01100	0.07310	0.00120	0.87407	464.0	7.2	455.7	7.2	491	23	455.7	7.2	1.8	Single Age
12WPY20_46	237.00	5.70	0.57700	0.02800	0.07520	0.00160	0.63524	462.0	18.0	467.1	9.6	442	86	467.1	9.6	1.1	Rim
12WPY20_46	372.60	1.15	0.95400	0.01100	0.10850	0.00100	0.86524	679.8	5.8	664.3	5.9	731	14	664.3	5.9	2.3	Core
12WPY20_47	879.00	1.83	0.76090	0.00750	0.09070	0.00110	0.80693	574.9	4.4	559.6	6.6	630	16	559.6	6.6	2.7	Single Age
12WPY20_48	179.00	6.82	1.10800	0.01600	0.13100	0.00210	0.83160	759.4	7.7	794.0	12.0	664	20	794.0	12.0	4.6	Single Age
12WPY20_49	567.00	1.04	1.17500	0.01700	0.12750	0.00190	0.46070	788.3	8.1	774.0	11.0	828	16	774.0	11.0	1.8	Single Age
12WPY20_50	726.00	4.94	0.38250	0.00900	0.05190	0.00130	0.89857	330.3	6.9	325.8	7.9	368	24	325.8	7.9	1.4	Single Age
12WPY20_51	864.00	12.71	0.54300	0.01400	0.06510	0.00140	0.93813	439.3	9.2	406.5	8.5	627	19	406.5	8.5	7.5	Single Age
12WPY20_52	677.00	1.08	0.38570	0.00660	0.05150	0.00078	0.83391	331.0	4.8	323.7	4.8	389	19	323.7	4.8	2.2	Single Age
12WPY20_53	179.00	6.40	0.98200	0.06200	0.11450	0.00500	0.27547	694.0	32.0	699.0	29.0	680	140	699.0	29.0	0.7	Rim
12WPY20_53	209.00	0.76	1.67600	0.02100	0.16840	0.00160	0.18624	998.8	8.1	1003.3	8.6	993	19	1003.3	8.6	0.5	Core
12WPY20_54	367.00	2.52	0.41050	0.00800	0.05510	0.00120	0.72596	349.7	5.6	345.5	7.3	361	34	345.5	7.3	1.2	Single Age
12WPY20_55	201.00	1.84	1.12600	0.01300	0.12710	0.00130	0.81930	767.7	5.8	771.3	7.3	751	17	771.3	7.3	0.5	Single Age
12WPY20_56	558.00	7.58	0.82600	0.01400	0.09840	0.00170	0.92798	610.6	8.0	605.0	10.0	636	14	605.0	10.0	0.9	Single Age
12WPY20_57	306.00	26.40	0.41600	0.01500	0.05610	0.00230	0.68454	353.0	11.0	352.0	14.0	367	70	352.0	14.0	0.3	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_57	40.90	2.73	0.64400	0.02100	0.08220	0.00240	0.74327	503.0	13.0	509.0	14.0	488	45	509.0	14.0	1.2	Core
12WPY20_58	602.00	8.28	0.44300	0.01800	0.05800	0.00240	0.78393	372.0	13.0	364.0	15.0	426	73	364.0	15.0	2.2	Rim
12WPY20_58	221.90	1.78	0.68300	0.00950	0.08660	0.00096	0.72612	528.3	5.7	535.4	5.7	501	24	535.4	5.7	1.3	Core
12WPY20_59	272.00	2.56	1.88000	0.01300	0.18400	0.00160	0.64646	1074.0	4.5	1088.8	8.8	1045	14	1088.8	8.8	1.4	Single Age
12WPY20_60	244.00	2.20	0.59340	0.00680	0.07700	0.00067	0.45635	472.9	4.3	478.2	4.0	461	25	478.2	4.0	1.1	Single Age
12WPY20_61	133.60	0.72	0.90020	0.00960	0.10570	0.00100	0.44732	651.6	5.1	648.0	5.8	658	21	648.0	5.8	0.6	Single Age
12WPY20_62	357.00	3.21	8.40000	0.20000	0.37200	0.00790	0.93175	2271.0	22.0	2037.0	37.0	2486	14	2486.0	14.0	18.1	Single Age
12WPY20_63	265.10	1.51	0.42020	0.00460	0.05746	0.00049	0.52590	356.1	3.3	360.1	3.0	331	20	360.1	3.0	1.1	Single Age
12WPY20_64	143.40	2.18	8.00600	0.07500	0.41700	0.00410	0.50589	2231.0	8.4	2251.0	19.0	2202	16	2202.0	16.0	2.2	Single Age
12WPY20_69	408.00	17.50	4.82000	0.19000	0.28510	0.00870	0.97532	1785.0	33.0	1615.0	43.0	1963	17	1963.0	17.0	17.7	Single Age
12WPY20_70	453.00	0.67	0.79570	0.00920	0.09510	0.00110	0.76765	594.2	5.2	585.5	6.3	634	16	585.5	6.3	1.5	Single Age
12WPY20_71	204.00	1.73	0.98900	0.02100	0.10340	0.00110	0.22547	697.0	11.0	634.4	6.6	910	46	634.4	6.6	9.0	Single Age
12WPY20_72	33.00	1.33	1.67700	0.03100	0.17220	0.00270	0.56496	1000.0	11.0	1024.0	15.0	949	30	1024.0	15.0	2.4	Single Age
12WPY20_73	1430.00	1.46	0.34090	0.00430	0.04622	0.00057	0.74584	297.8	3.2	291.3	3.5	349	16	291.3	3.5	2.2	Rim
12WPY20_73	467.00	1.07	0.40520	0.00800	0.05510	0.00110	0.84391	345.3	5.8	345.9	6.9	346	26	345.9	6.9	0.2	Core
12WPY20_74	106.80	0.57	0.84400	0.01200	0.10370	0.00150	0.60613	621.2	6.6	636.1	8.7	578	25	636.1	8.7	2.4	Single Age
12WPY20_75	1430.00	2.18	0.29330	0.00740	0.03651	0.00095	0.89714	260.9	5.8	231.1	5.9	518	22	DISC	DISC	11.4	Single Age
12WPY20_76	542.00	4.70	5.80000	0.23000	0.33900	0.01000	0.98862	1934.0	37.0	1880.0	50.0	2012	20	2012.0	20.0	6.6	Single Age
12WPY20_77	206.50	8.20	0.62980	0.00790	0.08062	0.00096	0.70204	495.8	4.9	499.8	5.7	477	17	499.8	5.7	0.8	Single Age
12WPY20_78	206.40	4.33	0.59410	0.00690	0.07502	0.00082	0.55016	473.3	4.4	466.3	4.9	508	22	466.3	4.9	1.5	Single Age
12WPY20_79	199.10	1.11	0.98920	0.00760	0.11626	0.00074	0.22488	698.2	3.9	709.0	4.3	667	19	709.0	4.3	1.5	Single Age
12WPY20_80	816.00	32.60	0.40020	0.00850	0.05410	0.00094	0.81501	341.7	6.1	339.6	5.8	377	35	339.6	5.8	0.6	Rim
12WPY20_80	302.00	2.88	0.58990	0.00700	0.07482	0.00081	0.54894	470.7	4.5	465.1	4.9	506	23	465.1	4.9	1.2	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_81	326.00	4.29	0.50370	0.00970	0.06680	0.00130	0.66127	414.1	6.6	416.6	7.9	397	39	416.6	7.9	0.6	Rim
12WPY20_81	58.60	1.08	0.68100	0.01400	0.08590	0.00160	0.59687	526.7	8.7	531.4	9.7	519	38	531.4	9.7	0.9	Core
12WPY20_82	785.00	0.68	0.79800	0.01200	0.09300	0.00140	0.90714	595.1	6.8	574.3	8.5	671	14	574.3	8.5	3.5	Single Age
12WPY20_83	128.00	0.73	0.90400	0.01400	0.10860	0.00160	0.68299	654.2	7.2	664.5	9.5	630	23	664.5	9.5	1.6	Single Age
12WPY20_84	75.80	0.56	1.74700	0.01800	0.16940	0.00190	0.35322	1025.7	6.8	1008.0	11.0	1046	24	1008.0	11.0	1.7	Single Age
12WPY20_85	67.80	0.73	0.63310	0.00910	0.08160	0.00110	0.43996	497.7	5.7	505.7	6.5	474	35	505.7	6.5	1.6	Single Age
12WPY20_86	116.90	0.96	7.81400	0.06200	0.41410	0.00330	0.78425	2209.4	7.1	2233.0	15.0	2181.4	8	2181.4	8.0	2.4	Single Age
12WPY20_87	617.00	1.60	0.40370	0.00600	0.05398	0.00087	0.89314	344.2	4.3	338.9	5.3	368	15	338.9	5.3	1.5	Single Age
12WPY20_88	216.00	7.90	0.54300	0.01300	0.06980	0.00120	0.62039	440.3	8.8	434.6	7.2	464	47	434.6	7.2	1.3	Single Age
12WPY20_89	153.00	4.08	0.79600	0.01900	0.09440	0.00150	0.20963	594.0	11.0	581.3	9.1	631	45	581.3	9.1	2.1	Rim
12WPY20_89	189.50	0.72	2.08200	0.03100	0.19230	0.00210	0.76007	1142.0	10.0	1134.0	11.0	1161	18	1134.0	11.0	0.7	Core
12WPY20_90	81.10	1.05	0.98500	0.01800	0.11490	0.00200	0.43879	696.4	9.4	701.0	12.0	621	36	701.0	12.0	0.7	Single Age
12WPY20_91	910.00	111.0	0.39370	0.00690	0.05093	0.00090	0.49488	337.0	5.0	320.2	5.5	451	54	320.2	5.5	5.0	Rim
12WPY20_91	213.00	6.30	1.88000	0.15000	0.16330	0.00960	0.98517	1058.0	53.0	973.0	53.0	1235	44	973.0	53.0	8.0	Core
12WPY20_92	37.50	1.84	3.21300	0.03200	0.26150	0.00300	0.55320	1459.9	7.8	1497.0	15.0	1392	20	1392.0	20.0	7.5	Single Age
12WPY20_93	76.00	1.38	0.72800	0.01200	0.08900	0.00110	0.34026	555.7	7.1	549.3	6.7	569	38	549.3	6.7	1.2	Single Age
12WPY20_94	309.00	5.80	0.50800	0.01300	0.06380	0.00150	0.74255	417.0	8.6	398.7	9.0	485	36	398.7	9.0	4.4	Rim
12WPY20_94	22.00	5.10	1.27300	0.05100	0.15090	0.00640	0.44834	833.0	23.0	906.0	36.0	640	110	906.0	36.0	8.8	Core
12WPY20_95	145.00	9.00	0.40400	0.01600	0.05240	0.00160	0.79975	344.0	12.0	329.3	9.8	394	54	329.3	9.8	4.3	Rim
12WPY20_95	294.00	3.05	0.66740	0.00780	0.07977	0.00093	0.59404	519.0	4.8	494.7	5.5	596	21	494.7	5.5	4.7	Core
12WPY20_96	165.40	0.90	4.91800	0.05100	0.31130	0.00390	0.93509	1804.7	8.8	1747.0	19.0	1866	11	1866.0	11.0	6.4	Single Age
12WPY20_97	85.50	1.07	1.56700	0.01700	0.16230	0.00150	0.67680	956.8	6.6	969.2	8.2	928	18	969.2	8.2	1.3	Single Age
12WPY20_98	183.00	2.41	0.66340	0.00890	0.08490	0.00140	0.84973	516.4	5.5	525.5	8.1	477	21	525.5	8.1	1.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_99	772.00	9.00	1.10400	0.02300	0.10490	0.00170	0.66151	755.0	11.0	643.0	10.0	1108	32	DISC	DISC	14.8	Rim
12WPY20_99	527.00	8.96	1.56800	0.02100	0.13150	0.00170	0.88168	957.2	8.3	796.2	9.4	1334	16	DISC	DISC	16.8	Core
12WPY20_100	609.00	1.64	0.37970	0.00960	0.05170	0.00150	0.85412	326.6	7.0	325.0	9.0	363	30	325.0	9.0	0.5	Single Age
12WPY20_101	226.00	4.23	9.33000	0.17000	0.41980	0.00600	0.93922	2369.0	17.0	2259.0	28.0	2477	13	2477.0	13.0	8.8	Single Age
12WPY20_102	128.60	0.56	1.75400	0.01400	0.17670	0.00160	0.79565	1028.5	5.3	1048.7	8.6	981	18	1048.7	8.6	2.0	Single Age
12WPY20_103	51.20	0.91	0.95600	0.02200	0.11580	0.00220	0.45126	680.0	12.0	706.0	13.0	592	42	706.0	13.0	3.8	Single Age
12WPY20_104	643.00	75.10	0.88300	0.01800	0.10340	0.00250	0.76155	642.3	9.7	634.0	15.0	674	26	634.0	15.0	1.3	Rim
12WPY20_104	113.30	1.19	1.89400	0.03000	0.17810	0.00210	0.67250	1079.0	10.0	1057.0	12.0	1116	22	1057.0	12.0	2.0	Core
12WPY20_105	289.00	7.30	0.54410	0.00830	0.06982	0.00075	0.84742	442.2	5.5	435.0	4.5	480	19	435.0	4.5	1.6	Single Age
12WPY20_106	421.00	33.40	0.97100	0.02200	0.11520	0.00230	0.93521	689.0	11.0	703.0	13.0	657	22	703.0	13.0	2.0	Rim
12WPY20_106	280.60	1.36	1.42600	0.01700	0.15200	0.00150	0.42384	900.8	7.6	912.1	8.5	878	27	912.1	8.5	1.3	Core
12WPY20_107	331.00	1.31	0.77100	0.01800	0.09410	0.00200	0.92949	579.0	10.0	580.0	11.0	588	17	580.0	11.0	0.2	Single Age
12WPY20_108	127.20	1.20	0.90200	0.02300	0.10930	0.00200	0.71712	652.0	12.0	669.0	12.0	618	35	669.0	12.0	2.6	Rim
12WPY20_108	80.70	0.68	1.19500	0.02300	0.13490	0.00250	0.53613	798.0	10.0	816.0	14.0	762	34	816.0	14.0	2.3	Core
12WPY20_109	950.00	14.60	0.41300	0.02200	0.05450	0.00250	0.91393	351.0	16.0	342.0	15.0	415	43	342.0	15.0	2.6	Rim
12WPY20_109	122.00	0.98	0.83500	0.01200	0.10230	0.00100	0.49430	615.8	6.7	627.7	5.9	580	28	627.7	5.9	1.9	Core
12WPY20_110	83.00	1.60	0.86700	0.01800	0.09950	0.00190	0.67906	633.0	9.6	612.0	11.0	693	31	612.0	11.0	3.3	Single Age
12WPY20_111	182.00	5.06	0.74600	0.01600	0.09160	0.00180	0.52105	564.9	9.5	565.0	10.0	580	32	565.0	10.0	0.0	Single Age
12WPY20_112	170.00	0.63	0.91160	0.00920	0.10900	0.00110	0.55731	657.7	4.9	666.7	6.1	622	24	666.7	6.1	1.4	Single Age
12WPY20_113	311.00	1.51	1.88600	0.01400	0.18400	0.00140	0.89369	1075.8	5.1	1088.6	7.5	1061	11	1088.6	7.5	1.2	Single Age
12WPY20_114	309.00	4.24	1.03700	0.02400	0.11960	0.00250	0.93906	721.0	12.0	728.0	14.0	711	18	728.0	14.0	1.0	Single Age
12WPY20_115	80.00	1.05	2.15900	0.03500	0.20590	0.00330	0.71778	1168.0	11.0	1207.0	18.0	1094	23	1094.0	18.0	3.3	Single Age
12WPY20_116	72.60	0.65	1.26600	0.01800	0.14050	0.00180	0.60127	830.9	8.0	847.0	10.0	792	26	847.0	10.0	1.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY20_117	88.60	0.67	1.50100	0.01600	0.15060	0.00140	0.54766	930.3	6.5	904.1	7.8	997	20	904.1	7.8	2.8	Single Age
12WPY20_118	350.00	1.15	2.22900	0.06400	0.15420	0.00280	0.95268	1188.0	21.0	924.0	16.0	1688	28	DISC	DISC	22.2	Single Age
12WPY20_119	1200.00	43.00	0.34700	0.01200	0.04620	0.00130	0.83723	302.7	9.2	291.1	8.3	421	26	291.1	8.3	3.8	Rim
12WPY20_119	206.00	0.55	0.80800	0.02900	0.09370	0.00250	0.91611	600.0	16.0	577.0	15.0	687	32	577.0	15.0	3.8	Core
12WPY20_120	253.00	0.61	1.82400	0.02300	0.17980	0.00250	0.80952	1053.5	8.2	1065.0	14.0	1046	17	1065.0	14.0	1.1	Single Age
12WPY20_121	363.00	3.44	0.80000	0.01900	0.09690	0.00240	0.95839	596.0	11.0	596.0	14.0	593	17	596.0	14.0	0.0	Single Age
12WPY20_122	1520.00	1.79	0.32400	0.00740	0.04360	0.00120	0.95930	284.7	5.5	274.8	7.1	371	18	274.8	7.1	3.5	Single Age
12WPY20_123	114.00	1.02	1.67500	0.01400	0.16980	0.00150	0.55165	998.9	5.4	1011.2	8.1	976	16	1011.2	8.1	1.2	Single Age
12WPY20_124	125.20	0.65	0.81600	0.01000	0.10030	0.00110	0.61946	605.5	5.8	615.9	6.5	567	22	615.9	6.5	1.7	Single Age

Permian strata U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY02_1	231.00	0.93	1.09900	0.01300	0.12440	0.00160	0.74287	752.5	6.1	755.8	8.9	740	18	755.8	8.9	0.4	Single Age
13WPY02_2	418.00	1.96	0.34610	0.00420	0.04766	0.00056	0.51486	301.7	3.2	300.1	3.4	322	26	300.1	3.4	0.5	Single Age
13WPY02_3	193.00	0.49	5.79100	0.05800	0.34660	0.00290	0.84287	1944.4	8.8	1918.0	14.0	1971	11	1971.0	11.0	2.7	Single Age
13WPY02_4	339.00	2.36	0.45100	0.01400	0.05940	0.00120	0.77074	377.2	9.8	371.9	7.1	420	45	371.9	7.1	1.4	Single Age
13WPY02_5	172.80	4.57	1.55200	0.05800	0.12880	0.00320	0.92098	948.0	23.0	781.0	18.0	1344	29	DISC	DISC	17.6	Single Age
13WPY02_6	368.00	0.31	0.84300	0.01300	0.09910	0.00160	0.66631	620.4	7.1	609.0	9.5	673	22	609.0	9.5	1.8	Single Age
13WPY02_7	386.00	1.99	0.71100	0.02200	0.08730	0.00250	0.96002	544.0	13.0	539.0	15.0	565	20	539.0	15.0	0.9	Single Age
13WPY02_8	421.00	2.37	1.04200	0.01100	0.11750	0.00110	0.78125	725.3	5.1	715.8	6.2	760	13	715.8	6.2	1.3	Single Age
13WPY02_9	676.00	1.23	0.37430	0.00460	0.04977	0.00047	0.60570	322.7	3.4	313.1	2.9	387	21	313.1	2.9	3.0	Single Age
13WPY02_10	335.10	4.08	1.07500	0.01000	0.12138	0.00093	0.57162	741.5	5.0	738.5	5.4	740	17	738.5	5.4	0.4	Single Age
13WPY02_11	303.00	1.21	0.87880	0.00810	0.10390	0.00089	0.53629	640.1	4.4	637.2	5.2	640	18	637.2	5.2	0.5	Single Age
13WPY02_12	129.50	2.15	12.55000	0.11000	0.49740	0.00410	0.76447	2645.5	8.6	2602.0	18.0	2669	11	2669.0	11.0	2.5	Single Age
13WPY02_13	224.00	1.72	0.71600	0.01000	0.08780	0.00089	0.27648	548.3	5.9	542.5	5.3	585	36	542.5	5.3	1.1	Single Age
13WPY02_14	117.40	1.99	0.60850	0.00840	0.07667	0.00065	0.00222	483.2	5.5	476.2	3.9	517	32	476.2	3.9	1.4	Single Age
13WPY02_15	62.90	0.50	10.41200	0.07000	0.46040	0.00380	0.55697	2471.8	6.2	2441.0	17.0	2488	13	2488.0	13.0	1.9	Single Age
13WPY02_16	289.00	3.89	0.57070	0.00800	0.07249	0.00093	0.53841	458.2	5.2	451.1	5.6	477	26	451.1	5.6	1.5	Single Age
13WPY02_17	136.00	1.42	0.96400	0.01400	0.11110	0.00130	0.43095	685.0	7.0	679.2	7.5	690	29	679.2	7.5	0.8	Single Age
13WPY02_18	667.00	3.20	0.87960	0.00880	0.10350	0.00110	0.73871	640.7	4.7	635.1	6.7	660	18	635.1	6.7	0.9	Rim
13WPY02_18	902.00	9.07	4.71000	0.15000	0.28390	0.00780	0.85938	1768.0	27.0	1610.0	39.0	1959	22	1959.0	22.0	17.8	Core
13WPY02_19	441.00	2.39	5.32000	0.12000	0.31190	0.00610	0.94902	1872.0	20.0	1757.0	30.0	2003	12	2003.0	12.0	12.3	Single Age
13WPY02_20	221.00	2.40	19.59000	0.16000	0.58650	0.00490	0.85297	3070.7	7.9	2975.0	20.0	3120.3	8.4	3120.3	8.4	4.7	Single Age
13WPY02_21	22.20	0.38	9.00000	0.20000	0.39570	0.00810	0.83083	2336.0	20.0	2147.0	38.0	2509	20	2509.0	20.0	14.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY02_22	49.70	1.41	4.33800	0.09200	0.29580	0.00500	0.88238	1698.0	19.0	1670.0	25.0	1735	23	1735.0	23.0	3.7	Single Age
13WPY02_23	93.30	1.37	3.17000	0.12000	0.22890	0.00560	0.93826	1445.0	30.0	1328.0	29.0	1643	31	1643.0	31.0	19.2	Single Age
13WPY02_24	140.80	1.17	0.96400	0.01200	0.11110	0.00100	0.23084	685.1	6.1	678.9	5.9	701	29	678.9	5.9	0.9	Single Age
13WPY02_25	222.60	0.44	9.92100	0.07300	0.43780	0.00390	0.63994	2428.0	6.6	2341.0	17.0	2493	13	2493.0	13.0	6.1	Single Age
13WPY02_26	160.00	1.35	0.98600	0.01500	0.11190	0.00150	0.67735	696.3	7.6	683.8	8.8	715	27	683.8	8.8	1.8	Single Age
13WPY02_27	160.00	0.91	1.23500	0.01400	0.13480	0.00130	0.54375	816.4	6.5	815.1	7.1	821	21	815.1	7.1	0.2	Single Age
13WPY02_28	171.50	0.90	0.83900	0.01300	0.09780	0.00160	0.56365	618.4	6.9	601.4	9.5	656	30	601.4	9.5	2.7	Single Age
13WPY02_29	53.00	0.59	0.79200	0.01500	0.09540	0.00120	0.10612	591.5	8.3	587.2	6.9	609	46	587.2	6.9	0.7	Single Age
13WPY02_30	365.00	1.07	1.43400	0.02900	0.13990	0.00200	0.83593	904.0	12.0	844.0	11.0	1043	21	844.0	11.0	6.6	Single Age
13WPY02_31	31.60	0.87	12.65000	0.12000	0.50650	0.00530	0.53183	2653.2	9.1	2644.0	23.0	2663	15	2663.0	15.0	0.7	Single Age
13WPY02_32	307.00	0.22	0.79230	0.00880	0.09510	0.00110	0.53900	592.2	5.0	585.6	6.3	628	21	585.6	6.3	1.1	Single Age
13WPY02_33	142.00	0.84	0.98200	0.01800	0.11330	0.00170	0.60712	694.1	9.1	691.7	9.6	691	31	691.7	9.6	0.3	Single Age
13WPY02_34	993.00	6.35	0.70100	0.01100	0.08580	0.00180	0.71964	539.4	6.7	531.0	11.0	594	41	531.0	11.0	1.6	Rim
13WPY02_34	919.00	0.86	5.43000	0.21000	0.27120	0.00860	0.94720	1888.0	31.0	1552.0	45.0	2273	19	DISC	DISC	31.7	Core
13WPY02_35	212.00	1.09	0.34110	0.00960	0.04642	0.00074	0.75877	297.6	7.2	292.5	4.6	369	43	292.5	4.6	1.7	Single Age
13WPY02_36	124.40	0.68	1.48100	0.01700	0.14680	0.00180	0.56951	922.1	6.8	883.0	10.0	1027	22	883.0	10.0	4.2	Single Age
13WPY02_37	268.50	1.28	1.55700	0.01400	0.15700	0.00150	0.58008	953.9	5.9	940.0	8.5	987	17	940.0	8.5	1.5	Single Age
13WPY02_38	225.60	1.36	0.35130	0.00540	0.04829	0.00051	0.44043	305.5	4.1	304.0	3.1	313	41	304.0	3.1	0.5	Single Age
13WPY02_39	76.50	0.73	1.41200	0.04300	0.12880	0.00210	0.18508	892.0	18.0	781.0	12.0	1163	49	DISC	DISC	12.4	Single Age
13WPY02_40	222.30	1.74	1.31000	0.01900	0.13690	0.00180	0.38981	849.4	8.4	827.0	10.0	902	26	827.0	10.0	2.6	Single Age
13WPY02_41	133.90	1.98	0.84100	0.01000	0.10060	0.00100	0.20540	619.6	5.8	617.8	6.0	620	29	617.8	6.0	0.3	Single Age
13WPY02_42	244.10	2.54	0.84600	0.01100	0.10100	0.00100	0.30762	620.4	5.6	620.5	6.0	633	27	620.5	6.0	0.0	Single Age
13WPY02_43	344.00	2.69	0.73510	0.00620	0.09014	0.00071	0.55962	559.4	3.6	556.3	4.2	572	18	556.3	4.2	0.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY02_44	131.90	0.78	0.73300	0.01100	0.08940	0.00110	0.50211	557.8	6.5	551.7	6.5	577	31	551.7	6.5	1.1	Single Age
13WPY02_45	110.00	1.02	1.70200	0.02000	0.16900	0.00190	0.60556	1009.0	7.6	1006.0	11.0	1019	22	1006.0	11.0	0.3	Single Age
13WPY02_46	112.10	0.89	9.03000	0.22000	0.40330	0.00950	0.87785	2341.0	22.0	2182.0	44.0	2479	16	2479.0	16.0	12.0	Single Age
13WPY02_47	140.40	1.53	9.65800	0.09800	0.43000	0.00460	0.80130	2402.2	9.3	2305.0	21.0	2487	11	2487.0	11.0	7.3	Single Age
13WPY02_48	168.40	1.64	0.41000	0.01400	0.04450	0.00089	0.51835	348.0	10.0	280.6	5.5	818	58	DISC	DISC	19.4	Single Age
13WPY02_49	299.00	1.37	1.17800	0.01800	0.12940	0.00190	0.72279	789.9	8.3	786.0	11.0	804	21	786.0	11.0	0.5	Single Age
13WPY02_50	173.40	2.34	0.79820	0.00910	0.09640	0.00110	0.26132	595.6	5.1	593.4	6.3	598	26	593.4	6.3	0.4	Single Age
13WPY02_52	144.00	0.94	0.71600	0.08100	0.04803	0.00099	0.76840	527.0	47.0	302.4	6.1	1480	190	DISC	DISC	42.6	Single Age
13WPY02_53	161.20	1.14	1.22700	0.01200	0.13100	0.00130	0.43585	812.8	5.6	793.4	7.4	875	22	793.4	7.4	2.4	Single Age
13WPY02_54	85.70	1.01	1.11800	0.02000	0.12570	0.00170	0.78011	761.4	9.9	762.9	9.6	763	30	762.9	9.6	0.2	Single Age
13WPY02_55	174.80	1.21	1.59400	0.01400	0.15850	0.00140	0.38537	967.5	5.6	948.6	8.0	1009	20	948.6	8.0	2.0	Single Age
13WPY02_58	141.00	0.95	1.41600	0.01300	0.14440	0.00140	0.10988	895.6	5.4	869.7	8.0	978	24	869.7	8.0	2.9	Single Age
13WPY02_59	307.00	2.10	0.33700	0.00360	0.04651	0.00041	0.41839	294.8	2.7	293.0	2.5	318	25	293.0	2.5	0.6	Single Age
13WPY02_60	171.00	1.68	1.70900	0.02100	0.16860	0.00190	0.62959	1012.5	8.2	1004.0	11.0	1034	21	1004.0	11.0	0.8	Single Age
13WPY02_61	112.00	0.85	1.16300	0.01800	0.12780	0.00170	0.26114	782.9	8.5	775.0	9.8	815	33	775.0	9.8	1.0	Single Age
13WPY02_62	133.80	1.02	0.90600	0.01100	0.10742	0.00095	0.45508	654.9	5.8	657.7	5.6	660	25	657.7	5.6	0.4	Single Age
13WPY02_63	208.00	1.26	0.40540	0.00620	0.05423	0.00054	0.35616	345.4	4.5	340.4	3.3	371	33	340.4	3.3	1.4	Single Age
13WPY02_64	189.00	2.65	1.28800	0.05200	0.13920	0.00430	0.95007	838.0	23.0	839.0	25.0	840	32	839.0	25.0	0.1	Single Age
13WPY02_65	281.20	2.59	1.73600	0.01700	0.17180	0.00190	0.83666	1021.9	6.2	1022.0	10.0	1031	17	1022.0	10.0	0.0	Single Age
13WPY02_66	341.00	1.31	6.12000	0.07200	0.35800	0.00430	0.86091	1992.0	10.0	1972.0	20.0	2017	10	2017.0	10.0	2.2	Single Age
13WPY02_67	168.60	3.19	12.57000	0.13000	0.38940	0.00510	0.77197	2647.4	9.6	2119.0	24.0	3083	17	DISC	DISC	31.3	Single Age
13WPY02_68	149.20	2.50	0.95790	0.00930	0.11233	0.00084	0.15316	682.6	4.7	686.2	4.8	670	25	686.2	4.8	0.5	Single Age
13WPY02_69	100.20	1.31	1.73900	0.01800	0.17280	0.00180	0.46118	1022.7	6.8	1027.1	9.7	1019	20	1027.1	9.7	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY02_70	555.00	2.40	1.17300	0.01000	0.12940	0.00110	0.75943	787.6	4.8	785.0	6.4	800	12	785.0	6.4	0.3	Single Age
13WPY02_71	579.00	4.14	0.70040	0.00940	0.08710	0.00160	0.66510	538.9	5.6	538.1	9.5	560	32	538.1	9.5	0.1	Rim
13WPY02_71	175.60	1.39	1.37800	0.01900	0.14650	0.00170	0.48910	879.2	7.9	881.1	9.7	880	25	881.1	9.7	0.2	Core
13WPY02_72	286.80	1.36	5.23900	0.06500	0.30790	0.00340	0.79852	1859.0	11.0	1732.0	17.0	2021	12	2021.0	12.0	14.3	Single Age
13WPY02_73	87.80	1.51	0.94800	0.01600	0.11230	0.00150	0.52511	677.7	8.8	686.0	8.9	658	32	686.0	8.9	1.2	Single Age
13WPY02_74	55.20	1.15	1.66300	0.02800	0.16430	0.00250	0.74219	994.0	10.0	980.0	14.0	1016	28	980.0	14.0	1.4	Single Age
13WPY02_75	166.10	0.83	5.93100	0.04200	0.31700	0.00200	0.62204	1966.5	6.3	1775.0	9.7	2182	11	2182.0	11.0	18.7	Single Age
13WPY02_76	214.20	0.98	0.77260	0.00980	0.09280	0.00110	0.51014	581.0	5.6	572.0	6.3	628	23	572.0	6.3	1.5	Single Age
13WPY02_77	255.00	0.86	1.57300	0.01400	0.15870	0.00140	0.64967	959.2	5.7	949.4	7.6	990	16	949.4	7.6	1.0	Single Age
13WPY02_78	170.00	1.70	1.11400	0.01400	0.12370	0.00170	0.51772	759.8	7.0	751.9	9.9	779	28	751.9	9.9	1.0	Single Age
13WPY02_79	96.10	0.67	0.34290	0.00550	0.04642	0.00069	0.23989	299.2	4.2	292.5	4.2	353	43	292.5	4.2	2.2	Single Age
13WPY02_80	566.00	2.48	0.35190	0.00480	0.04799	0.00056	0.63838	306.1	3.6	302.2	3.4	334	23	302.2	3.4	1.3	Single Age
13WPY02_81	128.20	1.63	0.38100	0.01700	0.04970	0.00100	0.68606	327.0	12.0	312.5	6.2	414	74	312.5	6.2	4.4	Single Age
13WPY02_82	533.00	2.98	0.35850	0.00930	0.04825	0.00075	0.44430	310.9	6.9	303.7	4.6	356	51	303.7	4.6	2.3	Rim
13WPY02_82	717.00	2.32	0.50900	0.01000	0.05897	0.00079	0.57500	417.7	7.0	369.4	4.8	706	37	DISC	DISC	11.6	Core
13WPY02_83	131.90	0.77	0.81730	0.00980	0.09730	0.00110	0.38111	607.0	5.6	598.4	6.2	636	28	598.4	6.2	1.4	Single Age
13WPY02_84	288.00	2.09	1.18010	0.00830	0.13030	0.00100	0.50492	791.2	3.9	789.3	5.7	801	15	789.3	5.7	0.2	Single Age
13WPY02_85	261.10	1.43	5.58600	0.06500	0.32800	0.00380	0.87701	1913.0	10.0	1828.0	18.0	2003	12	2003.0	12.0	8.7	Single Age
13WPY02_86	146.00	0.56	4.46000	0.14000	0.30330	0.00750	0.94854	1725.0	25.0	1707.0	37.0	1750	17	1750.0	17.0	2.5	Single Age
13WPY02_87	225.80	1.58	4.07000	0.20000	0.25800	0.01000	0.98827	1632.0	42.0	1474.0	53.0	1835	21	1835.0	21.0	19.7	Single Age
13WPY02_88	56.30	0.51	4.11000	0.11000	0.29810	0.00640	0.80230	1658.0	22.0	1681.0	32.0	1641	32	1641.0	32.0	2.4	Single Age
13WPY02_89	54.50	12.57	0.87700	0.02200	0.10250	0.00180	0.21371	638.0	12.0	629.0	10.0	659	49	629.0	10.0	1.4	Single Age
13WPY02_90	255.00	1.12	4.50900	0.03700	0.30190	0.00270	0.42009	1732.3	6.8	1700.0	14.0	1775	13	1775.0	13.0	4.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY02_91	152.00	2.36	0.79920	0.00880	0.09652	0.00091	0.39714	596.1	5.0	593.9	5.3	590	23	593.9	5.3	0.4	Single Age
13WPY02_92	212.00	0.58	5.06600	0.05200	0.32880	0.00290	0.73345	1830.0	8.6	1832.0	14.0	1834	13	1834.0	13.0	0.1	Single Age
13WPY02_93	235.00	3.51	1.15900	0.01400	0.12800	0.00170	0.76161	781.0	6.7	776.1	9.9	794	20	776.1	9.9	0.6	Single Age
13WPY02_94	305.00	2.31	1.29100	0.01900	0.14140	0.00200	0.78374	841.2	8.4	852.0	11.0	789	19	852.0	11.0	1.3	Single Age
13WPY02_95	198.00	0.82	0.81120	0.00980	0.09790	0.00110	0.78649	602.9	5.5	602.1	6.4	615	23	602.1	6.4	0.1	Single Age
13WPY02_96	307.00	1.66	0.36040	0.00520	0.04965	0.00065	0.49906	312.4	3.9	312.9	3.9	322	30	312.9	3.9	0.2	Single Age
13WPY02_97	58.60	0.41	0.76500	0.01800	0.09160	0.00120	0.36634	576.0	10.0	564.8	7.3	624	52	564.8	7.3	1.9	Single Age
13WPY02_98	17.19	43.80	0.83200	0.07900	0.10000	0.00250	0.01865	609.0	38.0	618.0	15.0	560	160	618.0	15.0	1.5	Single Age
13WPY02_99	412.00	0.94	1.56100	0.01800	0.15910	0.00170	0.68130	954.6	7.0	951.6	9.2	972	18	951.6	9.2	0.3	Single Age
13WPY02_101	256.50	1.11	0.77500	0.01300	0.09117	0.00094	0.22400	582.2	7.1	562.4	5.5	644	35	562.4	5.5	3.4	Single Age
13WPY02_102	397.00	1.21	0.82250	0.00790	0.09738	0.00078	0.63588	609.3	4.4	599.0	4.6	648	18	599.0	4.6	1.7	Single Age
13WPY02_103	47.90	1.49	0.90600	0.01800	0.10620	0.00130	0.03449	653.9	9.6	650.8	7.4	667	46	650.8	7.4	0.5	Single Age
13WPY02_104	2.06	14.10	1.22000	0.20000	0.09120	0.00580	0.33058	775.0	80.0	562.0	34.0	1440	280	DISC	DISC	27.5	Rim
13WPY02_104	10.40	1.46	4.17000	0.17000	0.27100	0.01200	0.44086	1666.0	33.0	1545.0	60.0	1825	74	1825.0	74.0	15.3	Core
13WPY02_105	171.00	1.13	0.84700	0.01200	0.10030	0.00130	0.50664	622.6	6.4	617.3	7.6	651	29	617.3	7.6	0.9	Single Age
13WPY02_106	126.00	0.70	6.01300	0.09100	0.35470	0.00570	0.87799	1976.0	13.0	1960.0	28.0	1986	13	1986.0	13.0	1.3	Single Age
13WPY02_107	214.20	0.47	10.03300	0.08800	0.45000	0.00460	0.77369	2437.3	8.1	2395.0	20.0	2478	10	2478.0	10.0	3.3	Single Age
13WPY02_108	429.00	2.44	2.86000	0.26000	0.13700	0.01000	0.98880	1356.0	69.0	824.0	56.0	2355	40	DISC	DISC	39.2	Single Age
13WPY02_109	107.00	2.12	0.77000	0.01400	0.09310	0.00091	0.03450	579.1	7.9	573.8	5.4	588	41	573.8	5.4	0.9	Single Age
13WPY02_110	156.00	0.93	13.13000	0.10000	0.51160	0.00440	0.75017	2688.5	7.3	2665.0	19.0	2708.5	8.6	2708.5	8.6	1.6	Single Age
13WPY02_111	147.00	0.90	0.85400	0.01100	0.10230	0.00110	0.54069	627.6	5.6	627.8	6.7	635	26	627.8	6.7	0.0	Single Age
13WPY02_113	229.00	0.97	0.84440	0.00930	0.09796	0.00072	0.24278	621.3	5.1	602.4	4.3	698	25	602.4	4.3	3.0	Single Age
13WPY02_114	237.00	1.26	1.73000	0.01900	0.16730	0.00170	0.76986	1019.2	7.2	997.1	9.5	1066	12	997.1	9.5	2.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY02_115	321.00	3.69	0.85390	0.00930	0.09905	0.00084	0.81875	626.5	5.1	608.8	4.9	689	21	608.8	4.9	2.8	Single Age
13WPY02_116	58.70	0.87	11.36000	0.14000	0.47560	0.00530	0.89474	2552.0	11.0	2507.0	23.0	2595	13	2595.0	13.0	3.4	Single Age
13WPY02_117	34.40	2.14	1.01400	0.03400	0.11490	0.00500	0.30295	716.0	19.0	701.0	29.0	767	98	701.0	29.0	2.1	Rim
13WPY02_117	20.10	7.50	11.44000	0.16000	0.44190	0.00920	0.32328	2559.0	13.0	2358.0	41.0	2702	32	2702.0	32.0	12.7	Core
13WPY02_118	131.20	0.43	0.83300	0.01100	0.09990	0.00093	0.52553	615.2	5.8	613.8	5.4	612	24	613.8	5.4	0.2	Single Age
13WPY02_119	413.00	1.16	1.12500	0.01200	0.11950	0.00120	0.66977	764.9	5.5	727.4	7.1	878	19	727.4	7.1	4.9	Single Age
13WPY02_120	143.00	0.72	1.25600	0.01300	0.13630	0.00100	0.37172	826.0	5.6	823.7	5.8	833	23	823.7	5.8	0.3	Single Age
13WPY02_121	542.00	6.80	0.75600	0.01100	0.09180	0.00120	0.88309	571.3	6.2	566.3	7.2	606	15	566.3	7.2	0.9	Single Age
13WPY02_122	38.60	1.10	7.76400	0.08500	0.40390	0.00580	0.58504	2203.0	10.0	2194.0	26.0	2213	23	2213.0	23.0	0.9	Single Age
13WPY02_123	168.70	0.61	0.83800	0.01000	0.09892	0.00087	0.28584	618.0	5.6	608.1	5.1	648	28	608.1	5.1	1.6	Single Age
13WPY02_124	254.00	3.31	0.34400	0.02000	0.04344	0.00088	0.39472	299.0	15.0	275.1	5.2	500	100	275.1	5.2	8.0	Single Age
13WPY02_125	152.00	1.25	1.77100	0.03200	0.16830	0.00220	0.34567	1036.0	12.0	1002.0	12.0	1117	38	1002.0	12.0	3.3	Single Age

Triassic strata U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY01_1	227.80	0.91	8.78000	0.17000	0.39620	0.00610	0.93854	2314.0	18.0	2151.0	28.0	2453	10	2452.7	9.8	12.3	Single Age
12WPY01_2	142.60	1.57	1.59200	0.01600	0.16230	0.00130	0.60290	967.7	6.2	969.2	7.1	967	11	969.2	7.1	0.2	Single Age
12WPY01_3	323.70	5.18	0.97600	0.01700	0.11370	0.00110	0.65077	691.4	8.8	693.9	6.1	696	22	693.9	6.1	0.4	Single Age
12WPY01_4	151.90	0.82	1.83100	0.01400	0.17790	0.00140	0.60783	1056.5	5.0	1056.8	7.5	1051	9	1056.8	7.5	0.0	Single Age
12WPY01_5	143.30	1.60	1.55100	0.01600	0.15710	0.00110	0.43249	950.8	6.2	940.4	6.3	967	8	940.4	6.3	1.1	Single Age
12WPY01_6	421.00	7.10	0.83090	0.00610	0.09874	0.00067	0.51709	614.0	3.4	607.0	3.9	641	7	607.0	3.9	1.1	Single Age
12WPY01_7	98.41	0.52	1.44800	0.01700	0.15070	0.00140	0.52701	909.7	6.8	904.6	7.8	913	11	904.6	7.8	0.6	Single Age
12WPY01_8	508.40	7.90	0.99690	0.00880	0.11040	0.00120	0.67760	702.2	4.5	675.0	7.0	791	14	675.0	7.0	3.9	Single Age
12WPY01_9	185.00	0.47	1.52300	0.02700	0.15370	0.00170	0.41389	939.0	11.0	921.5	9.6	968	14	921.5	9.6	1.9	Single Age
12WPY01_10	62.10	1.35	1.22000	0.02100	0.13340	0.00210	0.65626	809.0	9.6	807.0	12.0	813	16	807.0	12.0	0.2	Single Age
12WPY01_11	289.00	3.26	0.82790	0.00730	0.09933	0.00065	0.38689	612.3	4.0	610.4	3.8	618	11	610.4	3.8	0.3	Single Age
12WPY01_12	14.00	0.20	4.79000	0.14000	0.29920	0.00730	0.70119	1780.0	25.0	1686.0	36.0	1898	21	1898.0	21.0	11.2	Single Age
12WPY01_13	238.40	3.16	6.00800	0.03200	0.34610	0.00210	0.73086	1976.8	4.7	1916.0	10.0	2051	4	2050.5	4.2	6.6	Single Age
12WPY01_15	159.00	1.05	0.77520	0.00890	0.09442	0.00091	0.55250	582.5	5.1	581.6	5.4	577	11	581.6	5.4	0.2	Single Age
12WPY01_16	128.80	1.59	1.59000	0.01300	0.16180	0.00140	0.42677	966.8	5.1	966.9	8.0	965	11	966.9	8.0	0.0	Single Age
12WPY01_17	445.00	1.01	1.72900	0.01300	0.17080	0.00110	0.78216	1019.1	5.0	1016.5	6.0	1031	8	1016.5	6.0	0.3	Single Age
12WPY01_18	353.00	0.85	0.79200	0.01000	0.09417	0.00099	0.56910	592.8	5.9	580.1	5.9	637	13	580.1	5.9	2.1	Single Age
12WPY01_19	23.11	1.89	12.40000	0.18000	0.50160	0.00830	0.65322	2634.0	14.0	2620.0	36.0	2634	12	2634.0	12.0	0.5	Single Age
12WPY01_20	159.60	1.41	1.48800	0.02000	0.15310	0.00180	0.68124	924.8	8.0	918.0	10.0	952	11	918.0	10.0	0.7	Single Age
12WPY01_21	125.90	0.73	0.62700	0.01100	0.07970	0.00150	0.06287	494.3	6.8	494.1	9.2	493	28	494.1	9.2	0.0	Single Age
12WPY01_22	443.00	2.27	0.86710	0.00880	0.10175	0.00098	0.55207	633.9	4.8	624.7	5.8	665	10	624.7	5.8	1.5	Single Age
12WPY01_23	119.40	1.21	1.56100	0.01600	0.15870	0.00130	0.51183	957.2	6.5	949.7	7.3	981	12	949.7	7.3	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY01_24	72.00	0.68	10.75000	0.12000	0.44910	0.00510	0.74051	2501.0	10.0	2391.0	23.0	2594	10	2594.0	10.0	7.8	Single Age
12WPY01_25	67.40	0.70	0.80600	0.01100	0.09664	0.00097	0.01643	599.9	5.9	594.6	5.7	636	20	594.6	5.7	0.9	Single Age
12WPY01_26	105.00	0.53	1.72500	0.02200	0.17020	0.00120	0.26040	1017.3	8.2	1013.0	6.7	1032	17	1013.0	6.7	0.4	Single Age
12WPY01_27	56.70	0.95	1.34700	0.02100	0.14030	0.00180	0.28239	865.8	9.3	846.0	10.0	919	22	846.0	10.0	2.3	Single Age
12WPY01_28	168.00	1.22	10.35700	0.09800	0.46230	0.00400	0.82903	2467.9	9.0	2449.0	18.0	2478	7	2477.6	6.6	1.2	Single Age
12WPY01_29	168.00	1.02	6.10400	0.03900	0.35620	0.00220	0.70692	1990.5	5.6	1965.0	11.0	2022	5	2021.8	5.3	2.8	Single Age
12WPY01_30	139.60	6.95	0.61240	0.00750	0.07793	0.00059	0.23726	484.8	4.7	483.8	3.5	512	14	483.8	3.5	0.2	Single Age
12WPY01_31	131.80	0.59	0.78190	0.00910	0.09430	0.00120	0.23993	586.4	5.2	580.7	6.9	615	19	580.7	6.9	1.0	Single Age
12WPY01_32	617.00	3.93	0.75590	0.00600	0.09127	0.00075	0.68427	571.6	3.5	563.1	4.5	608	8	563.1	4.5	1.5	Single Age
12WPY01_34	98.10	1.87	2.73000	0.10000	0.21530	0.00680	0.94410	1331.0	28.0	1255.0	36.0	1468	14	1468.0	14.0	14.5	Single Age
12WPY01_35	174.90	0.49	15.99000	0.13000	0.55140	0.00490	0.79954	2876.1	7.6	2831.0	20.0	2900	5	2900.3	4.9	2.4	Single Age
12WPY01_36	284.00	2.01	0.88500	0.01300	0.10440	0.00130	0.44315	643.3	6.8	640.0	7.4	642	17	640.0	7.4	0.5	Single Age
12WPY01_37	591.00	0.76	0.49290	0.00570	0.06203	0.00071	0.64287	406.8	3.9	388.0	4.3	512	14	388.0	4.3	4.6	Single Age
12WPY01_38	175.00	0.52	0.69700	0.00720	0.08635	0.00081	0.29095	536.9	4.3	533.9	4.8	557	14	533.9	4.8	0.6	Single Age
12WPY01_39	189.00	1.28	0.74800	0.01700	0.08900	0.00110	0.28502	569.1	8.9	549.9	6.5	662	23	549.9	6.5	3.4	Single Age
12WPY01_40	109.60	0.81	1.79500	0.02700	0.17470	0.00140	0.59998	1044.6	9.5	1038.1	7.9	1052	17	1038.1	7.9	0.6	Single Age
12WPY01_41	313.00	0.89	0.86670	0.00930	0.10278	0.00085	0.76295	634.2	5.2	630.7	5.0	660	8	630.7	5.0	0.6	Single Age
12WPY01_42	394.00	0.80	11.39000	0.11000	0.47150	0.00570	0.80191	2555.1	8.7	2490.0	25.0	2615	6	2615.2	6.4	4.8	Single Age
12WPY01_43	90.90	1.02	1.73700	0.02200	0.17310	0.00190	0.57498	1022.0	8.2	1029.0	10.0	1036	14	1029.0	10.0	0.7	Single Age
12WPY01_44	110.10	1.02	0.84700	0.02000	0.10170	0.00120	0.37237	623.0	11.0	624.1	6.8	661	25	624.1	6.8	0.2	Single Age
12WPY01_45	117.60	0.55	0.87300	0.01100	0.10416	0.00090	0.15082	637.1	5.7	638.7	5.2	643	16	638.7	5.2	0.3	Single Age
12WPY01_46	197.40	0.40	1.64700	0.01500	0.16500	0.00140	0.70019	988.2	5.8	984.7	7.6	1001	8	984.7	7.6	0.4	Single Age
12WPY01_47	559.00	4.45	1.65100	0.03800	0.16270	0.00310	0.93027	990.0	15.0	971.0	17.0	1031	10	971.0	17.0	1.9	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY01_47	140.70	1.67	3.90300	0.05700	0.26280	0.00290	0.71237	1614.0	12.0	1504.0	15.0	1766	8	1766.4	7.7	14.9	Core
12WPY01_48	216.90	0.52	1.52800	0.01200	0.15390	0.00140	0.66026	941.5	4.9	922.6	7.6	996	7	922.6	7.6	2.0	Single Age
12WPY01_49	100.70	0.75	6.11400	0.04700	0.36030	0.00210	0.57204	1991.9	6.7	1983.6	9.8	2005	6	2005.3	5.7	1.1	Single Age
12WPY01_50	146.00	1.41	16.95000	0.37000	0.52200	0.01000	0.95071	2932.0	20.0	2706.0	43.0	3098	8	3098.0	7.6	12.7	Single Age
12WPY01_51	212.00	1.79	0.75890	0.00880	0.09257	0.00078	0.39368	573.2	5.1	570.7	4.6	607	19	570.7	4.6	0.4	Single Age
12WPY01_52	91.10	0.85	0.73900	0.01400	0.09210	0.00100	0.17089	561.7	8.1	567.8	6.2	544	20	567.8	6.2	1.1	Single Age
12WPY01_53	117.80	1.80	0.87600	0.01600	0.10360	0.00140	0.57351	638.4	8.8	635.3	8.0	652	17	635.3	8.0	0.5	Single Age
12WPY01_54	95.80	0.62	1.71500	0.01900	0.17170	0.00170	0.41238	1014.0	7.1	1021.5	9.3	1018	15	1021.5	9.3	0.7	Single Age
12WPY01_55	271.00	0.90	1.10500	0.01600	0.12360	0.00170	0.71100	755.6	7.7	750.9	9.7	780	13	750.9	9.7	0.6	Single Age
12WPY01_56	73.60	1.05	1.14900	0.02700	0.12640	0.00190	0.48318	776.0	13.0	767.0	11.0	832	22	767.0	11.0	1.2	Single Age
12WPY01_57	279.80	1.47	0.86700	0.01100	0.10160	0.00130	0.76645	633.6	6.2	624.0	7.8	682	13	624.0	7.8	1.5	Single Age
12WPY01_58	342.00	4.70	5.82700	0.04300	0.35490	0.00270	0.53430	1950.2	6.4	1958.0	13.0	1946	6	1946.4	5.7	0.6	Single Age
12WPY01_59	282.00	2.07	5.43000	0.09400	0.31530	0.00280	0.63998	1888.0	15.0	1767.0	14.0	2023	21	2023.0	21.0	12.7	Single Age
12WPY01_60	95.60	0.41	1.13800	0.01200	0.12580	0.00110	0.18078	771.5	5.9	763.8	6.2	786	15	763.8	6.2	1.0	Single Age
12WPY01_61	437.00	24.10	0.86200	0.01000	0.10190	0.00130	0.63783	630.9	5.5	625.5	7.7	664	15	625.5	7.7	0.9	Single Age
12WPY01_62	163.00	1.28	0.88300	0.01000	0.10503	0.00094	0.41524	642.1	5.4	643.8	5.5	657	15	643.8	5.5	0.3	Single Age
12WPY01_63	118.90	0.48	1.73400	0.01400	0.16720	0.00140	0.20820	1021.0	5.0	997.9	7.8	1080	14	997.9	7.8	2.3	Single Age
12WPY01_64	187.00	1.86	0.75740	0.00760	0.09339	0.00085	0.38108	572.4	4.4	575.5	5.0	563	12	575.5	5.0	0.5	Single Age
12WPY01_65	368.00	123.90	0.74650	0.00930	0.09160	0.00120	0.09371	566.2	5.4	564.9	7.2	585	21	564.9	7.2	0.2	Rim
12WPY01_65	189.00	1.69	1.70600	0.01700	0.16840	0.00170	0.64955	1010.5	6.5	1003.5	9.2	1026	10	1003.5	9.2	0.7	Core
12WPY01_66	163.00	1.12	0.88290	0.00940	0.10536	0.00094	0.57753	642.4	5.1	645.7	5.5	642	10	645.7	5.5	0.5	Single Age
12WPY01_67	98.90	0.41	0.78600	0.01900	0.09560	0.00130	0.46596	588.0	10.0	588.2	7.5	604	29	588.2	7.5	0.0	Single Age
12WPY01_68	278.00	3.49	21.84000	0.20000	0.60340	0.00640	0.89081	3175.9	9.1	3043.0	26.0	3263	5	3262.9	4.6	6.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY01_69	327.90	0.86	10.10000	0.13000	0.42990	0.00400	0.87815	2443.0	12.0	2305.0	18.0	2564	7	2564.3	7.4	10.1	Single Age
12WPY01_70	218.00	1.05	1.37200	0.02300	0.14610	0.00190	0.47339	878.7	9.3	879.0	11.0	884	13	879.0	11.0	0.0	Single Age
12WPY01_71	550.00	1.20	0.76050	0.00550	0.09182	0.00073	0.66542	574.2	3.1	566.3	4.3	602	7	566.3	4.3	1.4	Single Age
12WPY01_72	152.20	0.87	0.81400	0.01700	0.09860	0.00190	0.79470	604.0	9.4	606.0	11.0	602	16	606.0	11.0	0.3	Single Age
12WPY01_73	238.00	1.22	0.42510	0.00510	0.05744	0.00046	0.16638	360.1	3.5	360.0	2.8	361	18	360.0	2.8	0.0	Single Age
12WPY01_74	342.00	4.69	10.90000	0.15000	0.45320	0.00650	0.94078	2514.0	13.0	2408.0	29.0	2589	5	2589.0	5.0	7.0	Single Age
12WPY01_75	192.10	0.67	1.76800	0.01300	0.17180	0.00120	0.56957	1033.5	4.8	1021.8	6.8	1041	8	1021.8	6.8	1.1	Single Age
12WPY01_76	213.80	0.84	0.77280	0.00760	0.09361	0.00093	0.42621	581.3	4.3	576.8	5.5	591	15	576.8	5.5	0.8	Single Age
12WPY01_77	211.00	0.90	0.77500	0.01600	0.09150	0.00130	0.58042	582.3	9.3	564.3	7.9	619	27	564.3	7.9	3.1	Single Age
12WPY01_78	946.00	7.79	0.38000	0.01200	0.04958	0.00097	0.62601	327.2	8.6	311.9	6.0	402	24	311.9	6.0	4.7	Rim
12WPY01_78	133.80	1.75	0.83600	0.02000	0.09780	0.00130	0.64478	616.0	11.0	601.4	7.6	655	31	601.4	7.6	2.4	Core
12WPY01_79	90.00	0.98	1.01200	0.01800	0.11340	0.00150	0.33833	709.6	9.2	692.3	8.5	766	27	692.3	8.5	2.4	Single Age
12WPY01_80	2790.00	19.40	0.59900	0.01600	0.07420	0.00110	0.89580	476.0	10.0	461.7	6.8	545	12	461.7	6.8	3.0	Rim
12WPY01_80	229.00	2.77	0.76360	0.00770	0.09256	0.00078	0.45992	576.0	4.5	570.6	4.6	589	10	570.6	4.6	0.9	Core
12WPY01_82	376.00	0.58	0.78300	0.00610	0.09328	0.00087	0.49182	587.1	3.5	574.9	5.1	628	9	574.9	5.1	2.1	Single Age
12WPY01_83	60.50	0.83	1.60200	0.02500	0.15970	0.00160	0.26933	970.7	9.6	955.2	9.1	1000	23	955.2	9.1	1.6	Single Age
12WPY01_84	206.30	0.89	0.41450	0.00520	0.05645	0.00051	0.19942	352.0	3.7	354.0	3.1	352	17	354.0	3.1	0.6	Single Age
12WPY01_85	72.90	0.47	8.85000	0.10000	0.40070	0.00370	0.71904	2322.0	10.0	2172.0	17.0	2464	10	2464.0	10.0	11.9	Single Age
12WPY01_86	3300.00	7.32	0.77900	0.01100	0.08990	0.00130	0.81189	584.6	6.4	555.0	7.6	705	13	555.0	7.6	5.1	Rim
12WPY01_86	571.00	2.08	1.04070	0.00830	0.11803	0.00068	0.10515	724.3	4.2	719.2	3.9	749	17	719.2	3.9	0.7	Core
12WPY01_87	16.90	1.10	1.17800	0.04000	0.13590	0.00310	0.14077	793.0	20.0	821.0	18.0	694	27	821.0	18.0	3.5	Single Age
12WPY01_88	85.90	1.02	1.14700	0.01400	0.12740	0.00100	0.23407	775.3	6.5	772.9	5.9	807	16	772.9	5.9	0.3	Single Age
12WPY01_89	390.00	0.68	1.59700	0.03600	0.15610	0.00370	0.93959	968.0	14.0	934.0	20.0	1076	8	934.0	20.0	3.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY01_90	294.30	0.75	0.86200	0.01100	0.10471	0.00098	0.47326	631.1	5.9	641.9	5.7	617	14	641.9	5.7	1.7	Single Age
12WPY01_91	114.80	0.82	1.32900	0.01500	0.14280	0.00130	0.50124	858.2	6.5	860.5	7.2	856	13	860.5	7.2	0.3	Single Age
12WPY01_92	157.00	1.93	1.61700	0.01500	0.16460	0.00120	0.41979	976.5	5.8	982.3	6.7	976	10	982.3	6.7	0.6	Single Age
12WPY01_93	46.40	0.51	0.90700	0.01800	0.10690	0.00160	0.29298	655.1	9.5	654.9	9.5	675	20	654.9	9.5	0.0	Single Age
12WPY01_94	124.40	1.09	0.94500	0.01600	0.11200	0.00140	0.25205	675.2	8.6	684.5	8.0	665	20	684.5	8.0	1.4	Single Age
12WPY01_95	125.00	0.44	5.16900	0.03900	0.32870	0.00240	0.64766	1847.1	6.4	1832.0	12.0	1872	7	1871.7	7.3	2.1	Single Age
12WPY01_96	235.00	1.33	1.58500	0.02000	0.16190	0.00170	0.40234	963.9	7.8	967.0	9.4	959	14	967.0	9.4	0.3	Single Age
12WPY01_97	1199.00	1.73	0.83700	0.00710	0.09754	0.00067	0.35259	617.4	3.9	600.0	4.0	701	9	600.0	4.0	2.8	Single Age
12WPY01_99	159.00	1.30	0.56810	0.00780	0.07267	0.00074	0.28048	456.6	5.0	452.2	4.5	489	21	452.2	4.5	1.0	Single Age
12WPY01_100	115.80	0.58	6.58000	0.14000	0.35390	0.00360	0.39182	2055.0	18.0	1953.0	17.0	2170	27	2170.0	27.0	10.0	Single Age
12WPY01_101	95.20	92.80	0.74400	0.01300	0.09000	0.00150	0.33419	564.7	7.4	555.5	8.6	598	24	555.5	8.6	1.6	Single Age
12WPY01_102	441.00	0.79	5.93800	0.06800	0.34050	0.00310	0.80836	1966.3	9.9	1889.0	15.0	2046	8	2046.2	7.7	7.7	Single Age
12WPY01_103	454.00	1.45	0.74630	0.00760	0.09040	0.00064	0.64446	565.9	4.4	557.9	3.8	595	11	557.9	3.8	1.4	Single Age
12WPY01_104	769.00	9.24	0.74240	0.00580	0.08941	0.00064	0.70251	563.7	3.4	552.1	3.8	619	7	552.1	3.8	2.1	Single Age
12WPY01_105	84.70	0.96	1.78100	0.02200	0.17340	0.00150	0.35274	1037.9	8.1	1030.7	8.4	1058	18	1030.7	8.4	0.7	Single Age
12WPY01_106	159.30	0.61	0.88300	0.01200	0.10273	0.00074	0.08564	642.1	6.5	630.4	4.3	690	22	630.4	4.3	1.8	Single Age
12WPY01_107	185.60	1.81	1.02600	0.02100	0.11180	0.00200	0.21380	719.0	11.0	683.0	11.0	824	39	683.0	11.0	5.0	Rim
12WPY01_107	74.70	0.81	1.58500	0.04600	0.15540	0.00290	0.72203	963.0	18.0	931.0	16.0	1012	29	931.0	16.0	3.3	Core
12WPY01_108	298.00	3.34	0.93200	0.01100	0.10977	0.00088	0.47403	668.4	5.7	671.4	5.1	658	14	671.4	5.1	0.4	Single Age
12WPY01_109	271.90	1.04	0.37020	0.00570	0.05125	0.00058	0.18919	320.8	4.3	322.2	3.5	296	20	322.2	3.5	0.4	Single Age
12WPY01_110	24.40	0.26	6.46800	0.08600	0.36280	0.00440	0.36302	2041.0	12.0	1995.0	21.0	2089	13	2089.0	13.0	4.5	Single Age
12WPY01_111	152.40	0.61	10.71400	0.07500	0.45300	0.00310	0.69745	2499.2	6.4	2410.0	14.0	2567	6	2567.0	6.3	6.1	Single Age
12WPY01_112	600.00	2.98	0.87400	0.01900	0.10210	0.00190	0.70298	638.0	10.0	626.0	11.0	693	28	626.0	11.0	1.9	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY01_112	585.00	1.07	1.54300	0.01500	0.15400	0.00190	0.87723	947.6	6.2	923.0	11.0	1005	8	923.0	11.0	2.6	Core
12WPY01_113	1200.00	8.55	0.75810	0.00760	0.08880	0.00110	0.83180	572.8	4.4	548.4	6.3	673	9	548.4	6.3	4.3	Single Age
12WPY01_114	503.60	6.03	0.82800	0.01100	0.09790	0.00170	0.41125	612.5	6.3	602.1	9.8	672	21	602.1	9.8	1.7	Single Age
12WPY01_115	238.00	3.75	0.80010	0.00970	0.09710	0.00110	0.64585	596.6	5.5	597.1	6.6	594	12	597.1	6.6	0.1	Single Age
12WPY01_116	88.10	0.95	1.18400	0.01700	0.13140	0.00140	0.51362	792.8	7.7	795.8	7.7	760	14	795.8	7.7	0.4	Single Age
12WPY01_117	616.00	16.10	0.82200	0.01600	0.09730	0.00170	0.87470	609.1	9.1	598.8	9.7	647	11	598.8	9.7	1.7	Single Age
12WPY01_118	178.50	0.89	4.65500	0.03700	0.30610	0.00270	0.63225	1758.9	6.7	1721.0	13.0	1794	7	1794.0	7.4	4.1	Single Age
12WPY01_119	146.50	1.40	0.89700	0.01500	0.10590	0.00120	0.64491	649.7	8.0	648.9	7.2	651	19	648.9	7.2	0.1	Single Age
12WPY01_120	576.00	0.59	0.76100	0.00680	0.08944	0.00089	0.68661	575.3	4.1	552.2	5.3	658	8	552.2	5.3	4.0	Single Age
12WPY01_121	204.80	4.07	0.61260	0.00700	0.07712	0.00070	0.45332	485.0	4.4	478.9	4.2	500	14	478.9	4.2	1.3	Single Age
12WPY01_122	94.70	0.28	0.76900	0.01200	0.09093	0.00089	0.34929	579.0	6.7	561.0	5.3	629	17	561.0	5.3	3.1	Single Age
12WPY01_123	135.00	1.17	1.60100	0.01600	0.16200	0.00180	0.70011	970.2	6.4	968.0	10.0	975	12	968.0	10.0	0.2	Single Age
12WPY19_1	164.00	0.85	0.74890	0.00900	0.09070	0.00084	0.43230	568.0	5.1	559.6	5.0	601	13	559.6	5.0	1.5	Single Age
12WPY19_2	83.00	1.39	1.80300	0.02500	0.17490	0.00220	0.63391	1047.2	9.0	1039.0	12.0	1053	11	1039.0	12.0	0.8	Single Age
12WPY19_3	175.30	1.56	0.81560	0.00980	0.09730	0.00090	0.35908	605.4	5.5	598.5	5.3	632	16	598.5	5.3	1.1	Single Age
12WPY19_4	30.80	0.91	4.15000	0.14000	0.26300	0.00990	0.92980	1663.0	29.0	1502.0	51.0	1879	14	1879.0	14.0	20.1	Single Age
12WPY19_5	489.00	1.04	4.23300	0.09000	0.26620	0.00590	0.96157	1683.0	17.0	1520.0	30.0	1872	6	1872.2	5.6	18.8	Single Age
12WPY19_6	1270.00	126.00	0.68490	0.00940	0.08270	0.00140	0.73722	529.7	5.7	512.0	8.6	625	16	512.0	8.6	3.3	Rim
12WPY19_6	279.00	2.02	1.60200	0.01900	0.15730	0.00150	0.33238	970.8	7.4	941.9	8.2	1032	13	941.9	8.2	3.0	Core
12WPY19_7	310.00	1.32	0.81220	0.00620	0.09504	0.00076	0.47030	603.6	3.5	585.2	4.5	663	8	585.2	4.5	3.0	Single Age
12WPY19_8	58.30	2.15	0.83100	0.01800	0.09730	0.00180	0.38706	613.0	10.0	599.0	11.0	673	31	599.0	11.0	2.3	Single Age
12WPY19_9	156.80	2.47	0.54240	0.00830	0.07006	0.00080	0.34301	439.8	5.5	436.5	4.8	479	22	436.5	4.8	0.8	Single Age
12WPY19_10	303.00	0.47	0.78940	0.00650	0.09606	0.00089	0.41996	590.7	3.7	591.2	5.2	593	11	591.2	5.2	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY19_11	338.60	0.42	0.88800	0.01100	0.10369	0.00072	0.25834	645.0	5.7	636.0	4.2	686	15	636.0	4.2	1.4	Single Age
12WPY19_13	86.50	0.80	0.82000	0.01500	0.09860	0.00110	0.64626	608.3	8.1	606.0	6.4	632	19	606.0	6.4	0.4	Single Age
12WPY19_14	389.00	1.12	0.76280	0.00800	0.09315	0.00079	0.52802	575.4	4.6	574.1	4.7	584	12	574.1	4.7	0.2	Single Age
12WPY19_15	168.00	0.36	5.93000	0.03600	0.35120	0.00210	0.37216	1966.3	5.4	1940.0	10.0	1983	8	1983.3	8.0	2.2	Single Age
12WPY19_16	192.00	1.63	0.59020	0.00590	0.07583	0.00058	0.15248	472.0	3.5	471.2	3.5	486	13	471.2	3.5	0.2	Single Age
12WPY19_17	1360.00	103.00	0.30980	0.00440	0.04164	0.00071	0.59410	274.0	3.4	263.0	4.4	362	28	263.0	4.4	4.0	Rim
12WPY19_17	120.00	0.61	0.64600	0.02000	0.07940	0.00130	0.08740	506.0	12.0	492.7	8.0	603	28	492.7	8.0	2.6	Core
12WPY19_18	256.00	0.96	0.76810	0.00650	0.09251	0.00075	0.41051	578.6	3.7	570.3	4.4	607	13	570.3	4.4	1.4	Single Age
12WPY19_19	64.90	0.76	5.74200	0.05400	0.34080	0.00270	0.52898	1937.2	8.2	1890.0	13.0	1988	10	1988.4	9.7	4.9	Single Age
12WPY19_20	226.60	4.59	1.20170	0.00940	0.13226	0.00086	0.31199	801.2	4.3	800.7	4.9	810	10	800.7	4.9	0.1	Single Age
12WPY19_22	278.00	4.26	0.76110	0.00880	0.09230	0.00100	0.68962	574.4	5.1	569.2	6.0	589	11	569.2	6.0	0.9	Single Age
12WPY19_23	219.00	2.72	0.63140	0.00760	0.08070	0.00082	0.51024	496.8	4.7	500.3	4.9	509	13	500.3	4.9	0.7	Single Age
12WPY19_24	237.00	3.71	0.59570	0.00730	0.07559	0.00058	0.41764	474.3	4.6	469.7	3.5	493	14	469.7	3.5	1.0	Single Age
12WPY19_25	61.20	0.67	12.76000	0.16000	0.51430	0.00620	0.91155	2660.0	12.0	2678.0	27.0	2656	5	2656.3	5.4	0.8	Single Age
12WPY19_26	266.00	2.67	5.42300	0.05900	0.33460	0.00380	0.62128	1888.2	9.4	1860.0	19.0	1934	11	1934.0	11.0	3.8	Single Age
12WPY19_27	246.00	4.20	0.60100	0.01500	0.07650	0.00120	0.68518	477.4	9.4	475.3	7.1	488	23	475.3	7.1	0.4	Rim
12WPY19_27	230.00	1.14	0.83600	0.01200	0.10000	0.00130	0.56111	616.8	6.4	614.4	7.4	645	19	614.4	7.4	0.4	Core
12WPY19_28	320.40	0.82	11.71000	0.10000	0.48060	0.00270	0.74435	2582.3	8.3	2530.0	12.0	2635	6	2635.0	6.4	4.0	Single Age
12WPY19_29	188.00	1.96	0.79000	0.01200	0.09590	0.00130	0.44494	590.7	6.7	590.5	7.7	584	24	590.5	7.7	0.0	Rim
12WPY19_29	158.40	1.59	1.49700	0.02000	0.15530	0.00190	0.66618	929.2	8.3	931.0	11.0	945	13	931.0	11.0	0.2	Core
12WPY19_30	159.00	0.99	0.92500	0.01200	0.10990	0.00140	0.46249	664.7	6.4	671.9	8.0	649	18	671.9	8.0	1.1	Single Age
12WPY19_31	220.20	3.75	0.91260	0.00770	0.10749	0.00087	0.63852	658.3	4.1	658.1	5.0	660	11	658.1	5.0	0.0	Single Age
12WPY19_32	259.00	1.05	0.87130	0.00750	0.10348	0.00064	0.19298	636.6	4.0	634.7	3.7	638	9	634.7	3.7	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY19_33	220.00	1.91	0.37420	0.00450	0.05091	0.00037	0.33511	322.7	3.3	320.1	2.3	332	17	320.1	2.3	0.8	Single Age
12WPY19_34	119.40	2.88	6.59100	0.04100	0.36830	0.00250	0.60622	2057.9	5.4	2021.0	12.0	2087	7	2086.6	7.3	3.1	Single Age
12WPY19_36	151.90	1.60	6.37400	0.03900	0.36200	0.00260	0.71790	2028.5	5.3	1992.0	12.0	2059	5	2059.0	4.9	3.3	Single Age
12WPY19_37	139.40	0.39	1.68000	0.01300	0.16440	0.00120	0.44991	1001.3	5.1	981.1	6.7	1041	10	981.1	6.7	2.0	Single Age
12WPY19_38	60.50	0.69	5.97900	0.04800	0.35210	0.00250	0.57385	1972.3	6.9	1944.0	12.0	1993	7	1992.5	7.4	2.4	Single Age
12WPY19_39	79.00	0.56	5.82400	0.04300	0.34640	0.00240	0.61131	1949.7	6.5	1917.0	12.0	1979	6	1978.6	6.4	3.1	Single Age
12WPY19_40	74.00	0.42	11.86000	0.17000	0.49930	0.00630	0.93182	2593.0	14.0	2610.0	27.0	2555	12	2555.0	12.0	2.2	Single Age
12WPY19_41	214.50	0.76	0.78680	0.00630	0.09519	0.00071	0.26505	589.3	3.6	586.7	4.3	595	11	586.7	4.3	0.4	Single Age
12WPY19_42	271.90	6.79	0.59900	0.01400	0.07530	0.00120	0.78046	476.3	8.8	467.7	7.1	520	22	467.7	7.1	1.8	Rim
12WPY19_42	372.40	2.22	0.82300	0.02300	0.09640	0.00200	0.90128	609.0	13.0	593.0	12.0	652	19	593.0	12.0	2.6	Core
12WPY19_43	86.80	0.47	1.56400	0.01900	0.15770	0.00140	0.41053	955.4	7.5	944.0	8.0	976	14	944.0	8.0	1.2	Single Age
12WPY19_44	136.90	0.86	1.68200	0.01200	0.16550	0.00120	0.41656	1001.8	4.5	987.0	6.8	1029	11	987.0	6.8	1.5	Single Age
12WPY19_45	171.00	1.91	0.75400	0.01300	0.09040	0.00110	0.27288	570.2	7.2	558.0	6.6	602	19	558.0	6.6	2.1	Single Age
12WPY19_46	96.80	1.03	8.78000	0.13000	0.37460	0.00520	0.88319	2315.0	14.0	2053.0	24.0	2567	7	2567.1	7.3	20.0	Single Age
12WPY19_47	72.00	4.57	0.81900	0.01600	0.09830	0.00170	0.56982	606.5	9.1	605.3	9.9	613	17	605.3	9.9	0.2	Single Age
12WPY19_48	276.00	2.12	0.93780	0.00780	0.10934	0.00081	0.30421	671.5	4.1	668.9	4.7	680	12	668.9	4.7	0.4	Single Age
12WPY19_49	650.00	1.96	0.40620	0.00470	0.05437	0.00064	0.44769	346.1	3.4	341.3	3.9	367	14	341.3	3.9	1.4	Single Age
12WPY19_50	777.00	5.15	0.46400	0.02300	0.05150	0.00180	0.89823	387.0	16.0	324.0	11.0	784	31	DISC	DISC	16.3	Rim
12WPY19_50	57.10	1.08	4.39000	0.15000	0.27880	0.00880	0.92009	1708.0	29.0	1584.0	44.0	1874	12	1874.0	12.0	15.5	Core
12WPY19_51	87.50	1.22	0.79900	0.01100	0.09770	0.00100	0.19093	596.8	6.5	600.7	6.0	598	21	600.7	6.0	0.7	Single Age
12WPY19_52	195.00	2.60	0.78600	0.01500	0.09600	0.00140	0.54798	588.8	8.8	591.2	8.4	577	14	591.2	8.4	0.4	Rim
12WPY19_52	139.00	0.73	1.72600	0.02600	0.16680	0.00240	0.49588	1017.9	9.7	994.0	13.0	1052	23	994.0	13.0	2.3	Core
12WPY19_53	246.00	7.29	0.60910	0.00760	0.07706	0.00076	0.30714	482.8	4.8	479.1	4.5	518	19	479.1	4.5	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY19_54	203.00	3.02	0.64270	0.00890	0.08072	0.00082	0.44325	503.7	5.5	500.4	4.9	523	16	500.4	4.9	0.7	Single Age
12WPY19_55	134.00	1.35	1.59000	0.01300	0.16180	0.00110	0.44536	966.1	4.9	966.7	6.3	976	10	966.7	6.3	0.1	Single Age
12WPY19_57	274.80	3.68	0.91010	0.00780	0.10785	0.00074	0.58403	657.0	4.1	660.2	4.3	658	9	660.2	4.3	0.5	Single Age
12WPY19_58	90.80	3.40	0.93300	0.01400	0.10840	0.00100	0.16657	668.5	7.4	663.2	6.0	684	17	663.2	6.0	0.8	Single Age
12WPY19_59	148.10	1.01	6.20800	0.06700	0.35430	0.00340	0.67666	2005.2	9.4	1955.0	16.0	2053	10	2052.7	9.7	4.8	Single Age
12WPY19_60	200.30	0.64	0.80400	0.01100	0.09660	0.00140	0.71898	598.7	6.0	594.6	8.0	616	10	594.6	8.0	0.7	Single Age
12WPY19_61	633.00	1.11	1.71200	0.01900	0.16550	0.00210	0.85065	1012.7	7.2	987.0	12.0	1051	9	987.0	12.0	2.5	Single Age
12WPY19_62	138.80	2.18	0.83900	0.01000	0.09910	0.00088	0.31845	620.1	5.8	609.1	5.2	637	16	609.1	5.2	1.8	Single Age
12WPY19_63	290.00	0.91	5.05500	0.08300	0.31450	0.00550	0.95810	1827.0	14.0	1762.0	27.0	1899	5	1898.9	5.3	7.2	Single Age
12WPY19_64	229.60	1.91	0.77060	0.00870	0.09098	0.00098	0.44437	580.0	5.0	561.3	5.8	648	13	561.3	5.8	3.2	Single Age
12WPY19_65	49.30	0.65	0.75700	0.01400	0.09130	0.00110	0.20578	573.8	7.8	563.1	6.3	596	26	563.1	6.3	1.9	Single Age
12WPY19_66	265.40	1.16	0.30460	0.00640	0.04241	0.00059	0.01063	269.9	5.0	267.7	3.6	299	40	267.7	3.6	0.8	Single Age
12WPY19_67	210.00	0.69	0.86890	0.00970	0.10310	0.00110	0.44825	634.8	5.3	632.8	6.3	646	15	632.8	6.3	0.3	Single Age
12WPY19_68	148.00	2.12	0.77390	0.00920	0.09506	0.00077	0.34993	581.7	5.3	585.4	4.5	563	16	585.4	4.5	0.6	Single Age
12WPY19_69	286.00	1.54	0.99000	0.02000	0.11430	0.00180	0.60398	698.0	10.0	698.0	10.0	685	18	698.0	10.0	0.0	Single Age
12WPY19_70	595.00	1.20	3.81600	0.05200	0.25910	0.00350	0.90029	1595.0	11.0	1485.0	18.0	1739	6	1738.9	6.4	14.6	Single Age
12WPY19_71	136.10	0.29	1.51500	0.02500	0.15550	0.00160	0.61769	936.0	10.0	931.8	8.8	960	11	931.8	8.8	0.4	Single Age
12WPY19_72	32.00	0.65	4.77000	0.18000	0.27480	0.00950	0.86808	1774.0	32.0	1563.0	48.0	2039	14	2039.0	14.0	23.3	Single Age
12WPY19_73	237.50	1.12	1.03500	0.01000	0.11787	0.00094	0.45191	721.9	5.3	718.3	5.4	746	14	718.3	5.4	0.5	Single Age
12WPY19_74	251.00	1.54	0.80590	0.00890	0.09768	0.00094	0.60918	599.9	5.0	600.8	5.5	601	12	600.8	5.5	0.2	Single Age
12WPY19_75	384.00	1.41	4.32300	0.02900	0.29340	0.00220	0.73589	1697.6	5.5	1658.0	11.0	1751	6	1751.4	5.8	5.3	Single Age
12WPY19_76	116.20	1.70	5.69100	0.08600	0.34300	0.00440	0.69118	1930.0	13.0	1901.0	21.0	1959	15	1959.0	15.0	3.0	Single Age
12WPY19_77	150.00	0.82	11.91000	0.15000	0.49650	0.00420	0.82836	2598.0	12.0	2601.0	18.0	2599	10	2599.0	10.0	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY19_78	158.20	1.24	0.79990	0.00750	0.09709	0.00066	0.19923	596.6	4.3	597.3	3.9	601	14	597.3	3.9	0.1	Single Age
12WPY19_79	69.50	0.74	0.85800	0.02700	0.10250	0.00220	0.21381	628.0	15.0	629.0	13.0	649	51	629.0	13.0	0.2	Single Age
12WPY19_80	142.90	1.81	1.83600	0.02000	0.16960	0.00140	0.01589	1059.1	7.6	1009.9	7.7	1165	17	1009.9	7.7	4.6	Single Age
12WPY19_81	525.00	1.43	0.80000	0.01900	0.09670	0.00170	0.89127	596.0	11.0	595.0	10.0	612	16	595.0	10.0	0.2	Single Age
12WPY19_82	131.00	0.97	10.08400	0.05800	0.45290	0.00260	0.79763	2442.2	5.4	2410.0	12.0	2478	5	2477.8	5.1	2.7	Single Age
12WPY19_83	59.30	0.63	6.48200	0.07500	0.37060	0.00280	0.48175	2042.0	10.0	2032.0	13.0	2058	12	2058.0	12.0	1.3	Single Age
12WPY19_84	86.80	0.71	4.82100	0.03400	0.31630	0.00280	0.51870	1789.0	5.8	1771.0	14.0	1821	8	1821.0	7.6	2.7	Single Age
12WPY19_85	220.00	0.69	0.79880	0.00900	0.09556	0.00089	0.29880	596.0	5.1	588.3	5.2	621	20	588.3	5.2	1.3	Single Age
12WPY19_86	169.40	0.95	0.94110	0.00840	0.10969	0.00081	0.46070	673.3	4.4	670.9	4.7	696	12	670.9	4.7	0.4	Single Age
12WPY19_87	346.30	1.74	8.48000	0.30000	0.36920	0.00970	0.95837	2284.0	31.0	2024.0	46.0	2526	19	2526.0	19.0	19.9	Single Age
12WPY19_88	276.30	1.47	0.40930	0.00510	0.05506	0.00048	0.28836	348.8	3.8	345.5	2.9	369	20	345.5	2.9	0.9	Single Age
12WPY19_89	165.60	0.31	0.78000	0.01400	0.09480	0.00130	0.36448	585.1	7.9	584.1	7.7	604	23	584.1	7.7	0.2	Single Age
12WPY19_90	665.00	1.30	10.95900	0.08600	0.45470	0.00420	0.89250	2519.4	7.3	2419.0	17.0	2607	4	2606.5	4.3	7.2	Single Age
12WPY19_91	213.00	1.25	1.61000	0.01100	0.16170	0.00110	0.28377	973.9	4.2	966.0	6.1	999	10	966.0	6.1	0.8	Single Age
12WPY19_92	22.00	0.29	1.65000	0.03400	0.16410	0.00290	0.20482	988.0	13.0	979.0	16.0	1042	28	979.0	16.0	0.9	Single Age
12WPY19_94	79.90	1.78	0.93400	0.01600	0.10890	0.00130	0.37405	668.9	8.6	666.4	7.7	671	21	666.4	7.7	0.4	Single Age
12WPY19_95	106.00	0.68	0.81100	0.01400	0.09725	0.00087	0.04565	603.3	7.6	598.2	5.1	600	29	598.2	5.1	0.8	Single Age
12WPY19_96	265.00	1.05	0.32310	0.00420	0.04465	0.00034	0.01563	284.6	3.2	281.6	2.1	321	19	281.6	2.1	1.1	Single Age
12WPY19_97	118.60	0.69	0.76110	0.00940	0.08961	0.00085	0.28577	574.4	5.4	553.2	5.0	640	17	553.2	5.0	3.7	Single Age
12WPY19_98	267.00	2.95	0.96560	0.00820	0.11225	0.00085	0.45481	686.0	4.2	685.8	4.9	688	10	685.8	4.9	0.0	Single Age
12WPY19_99	311.00	2.34	6.00800	0.05500	0.33460	0.00270	0.74970	1978.3	8.3	1860.0	13.0	2091	8	2091.3	7.9	11.1	Single Age
12WPY19_100	169.50	1.10	1.12600	0.01400	0.12700	0.00120	0.46788	765.5	6.8	770.4	6.7	741	13	770.4	6.7	0.6	Single Age
12WPY19_101	475.00	1.32	0.60700	0.00690	0.07544	0.00059	0.59912	481.5	4.3	468.8	3.6	542	12	468.8	3.6	2.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY19_102	290.00	0.64	0.87480	0.00800	0.10355	0.00091	0.60679	638.6	4.2	635.1	5.3	641	10	635.1	5.3	0.5	Single Age
12WPY19_103	151.30	2.66	0.63900	0.00810	0.08011	0.00066	0.36188	502.1	5.1	496.8	3.9	532	15	496.8	3.9	1.1	Single Age
12WPY19_104	47.70	0.84	5.36900	0.07100	0.32980	0.00390	0.61587	1879.0	11.0	1837.0	19.0	1923	12	1923.0	12.0	4.5	Single Age
12WPY19_105	66.50	0.99	5.39300	0.04300	0.33590	0.00260	0.50635	1883.3	6.8	1868.0	13.0	1899	9	1899.2	8.5	1.6	Single Age
12WPY19_106	500.00	8.30	0.87100	0.01200	0.10200	0.00170	0.75962	636.0	6.4	626.0	10.0	661	13	626.0	10.0	1.6	Single Age
12WPY19_107	310.00	1.50	2.09700	0.01500	0.19280	0.00150	0.69584	1147.5	4.7	1136.6	8.0	1159	6	1136.6	8.0	0.9	Single Age
12WPY19_108	289.00	2.03	0.80800	0.01200	0.09650	0.00120	0.69085	601.2	7.0	593.6	7.0	633	14	593.6	7.0	1.3	Single Age
12WPY19_109	117.90	1.32	4.73000	0.04000	0.30480	0.00210	0.59246	1772.1	7.1	1715.0	10.0	1837	8	1836.9	7.5	6.6	Single Age
12WPY19_110	36.90	0.73	5.33700	0.05600	0.32210	0.00360	0.41758	1874.0	9.0	1799.0	18.0	1950	13	1950.0	13.0	7.7	Single Age
12WPY19_111	173.00	1.37	0.81610	0.00870	0.09781	0.00073	0.17250	605.7	4.9	601.6	4.3	610	15	601.6	4.3	0.7	Single Age
12WPY19_112	191.60	0.89	1.79800	0.01500	0.17450	0.00100	0.27135	1044.3	5.4	1036.7	5.8	1051	11	1036.7	5.8	0.7	Single Age
12WPY19_113	64.30	1.35	1.56800	0.02100	0.15920	0.00160	0.09087	957.5	8.2	952.3	8.9	966	15	952.3	8.9	0.5	Single Age
12WPY19_114	196.40	0.60	0.82750	0.00760	0.09943	0.00070	0.23192	612.0	4.2	611.1	4.1	614	10	611.1	4.1	0.1	Single Age
12WPY19_115	21.08	2.17	1.00300	0.03000	0.11590	0.00180	0.35170	705.0	15.0	707.0	10.0	689	29	707.0	10.0	0.3	Single Age
12WPY19_116	216.80	1.21	0.94640	0.00860	0.11129	0.00090	0.22997	676.1	4.5	680.2	5.2	669	15	680.2	5.2	0.6	Single Age
12WPY19_117	111.50	0.85	11.91000	0.11000	0.48500	0.00390	0.71629	2597.0	8.3	2549.0	17.0	2649	7	2648.7	6.5	3.8	Single Age
12WPY19_118	131.90	1.04	0.83400	0.01600	0.09826	0.00090	0.22349	615.8	8.8	604.2	5.3	654	30	604.2	5.3	1.9	Single Age
12WPY19_119	42.00	1.21	0.88100	0.01800	0.10520	0.00140	0.06724	640.8	9.5	644.7	8.1	629	31	644.7	8.1	0.6	Single Age
12WPY19_120	236.00	1.06	0.86610	0.00730	0.10311	0.00071	0.29040	633.3	4.0	632.6	4.1	643	13	632.6	4.1	0.1	Single Age
12WPY19_121	359.20	1.05	0.96200	0.01100	0.11182	0.00091	0.56700	685.2	5.4	683.3	5.3	703	11	683.3	5.3	0.3	Single Age
12WPY19_122	198.00	2.34	0.78140	0.00980	0.09520	0.00120	0.57179	586.0	5.6	586.2	6.8	583	10	586.2	6.8	0.0	Single Age
12WPY19_123	174.00	2.39	0.77650	0.00870	0.09502	0.00081	0.18281	583.3	5.0	585.1	4.7	587	17	585.1	4.7	0.3	Single Age
13WPY01_1	15.78	59.60	0.76000	0.02800	0.09160	0.00180	0.21165	572.0	16.0	565.0	10.0	620	77	565.0	10.0	1.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY01_2	88.10	0.42	0.81560	0.00950	0.09763	0.00086	0.37394	605.3	5.3	600.5	5.1	615	24	600.5	5.1	0.8	Single Age
13WPY01_3	115.20	1.52	0.78400	0.01000	0.09210	0.00110	0.55480	587.3	5.9	568.1	6.4	662	28	568.1	6.4	3.3	Single Age
13WPY01_4	184.00	1.48	0.81500	0.01000	0.09681	0.00092	0.64516	605.1	5.7	595.6	5.4	640	19	595.6	5.4	1.6	Single Age
13WPY01_5	228.00	6.56	0.83240	0.00900	0.09940	0.00120	0.63120	614.7	5.0	610.7	7.1	653	22	610.7	7.1	0.7	Single Age
13WPY01_6	244.00	55.70	0.80400	0.03000	0.09580	0.00280	0.68768	599.0	17.0	589.0	16.0	621	62	589.0	16.0	1.7	Rim
13WPY01_6	68.10	0.95	1.06200	0.01700	0.11730	0.00190	0.31401	734.2	8.3	715.0	11.0	812	43	715.0	11.0	2.6	Core
13WPY01_7	101.50	1.05	1.85000	0.01800	0.17110	0.00180	0.54232	1063.1	6.5	1018.0	10.0	1162	19	1018.0	10.0	4.2	Single Age
13WPY01_8	241.00	2.07	11.35000	0.14000	0.47490	0.00730	0.74493	2552.0	12.0	2504.0	32.0	2577	16	2577.0	16.0	2.8	Single Age
13WPY01_9	101.10	2.38	0.90800	0.01300	0.10480	0.00110	0.51272	655.6	6.8	642.4	6.2	697	30	642.4	6.2	2.0	Single Age
13WPY01_10	515.00	1.60	0.97300	0.01800	0.10180	0.00150	0.86974	689.4	9.3	625.0	9.0	900	20	625.0	9.0	9.3	Single Age
13WPY01_11	78.10	0.78	1.56200	0.01700	0.15750	0.00140	0.34275	955.7	6.5	942.9	7.9	984	23	942.9	7.9	1.3	Single Age
13WPY01_12	164.00	1.21	4.75400	0.07000	0.29340	0.00440	0.85841	1775.0	12.0	1658.0	22.0	1919	15	1919.0	15.0	13.6	Single Age
13WPY01_13	188.40	1.25	1.62300	0.01800	0.16300	0.00190	0.69895	980.4	7.1	973.0	10.0	1003	17	973.0	10.0	0.8	Single Age
13WPY01_14	191.90	2.56	0.34010	0.00460	0.04683	0.00039	0.39116	297.2	3.5	295.0	2.4	318	27	295.0	2.4	0.7	Single Age
13WPY01_15	352.00	1.38	0.87250	0.00680	0.10259	0.00088	0.58601	637.4	3.8	629.5	5.2	668	18	629.5	5.2	1.2	Single Age
13WPY01_16	530.30	1.97	21.32000	0.25000	0.57220	0.00660	0.85107	3152.0	12.0	2916.0	27.0	3297	10	3297.0	10.0	11.6	Single Age
13WPY01_17	33.39	1.77	10.09200	0.09600	0.44940	0.00510	0.66266	2442.5	8.8	2392.0	23.0	2495	14	2495.0	14.0	4.1	Single Age
13WPY01_18	169.30	0.80	5.54200	0.04900	0.33340	0.00290	0.75567	1907.5	7.5	1855.0	14.0	1962	11	1962.0	11.0	5.5	Single Age
13WPY01_19	274.00	1.05	9.02000	0.22000	0.41140	0.00720	0.96531	2335.0	24.0	2220.0	33.0	2452	13	2452.0	13.0	9.5	Single Age
13WPY01_20	475.00	0.66	0.76500	0.00980	0.09110	0.00130	0.81686	576.6	5.6	561.7	7.8	622	15	561.7	7.8	2.6	Single Age
13WPY01_21	210.10	1.60	1.13600	0.00980	0.12560	0.00130	0.62237	770.4	4.7	762.4	7.4	787	20	762.4	7.4	1.0	Single Age
13WPY01_22	92.50	0.62	5.34600	0.04200	0.33920	0.00320	0.56595	1875.9	6.7	1882.0	16.0	1872	16	1872.0	16.0	0.5	Single Age
13WPY01_23	240.20	3.38	0.86300	0.01100	0.10130	0.00130	0.54977	631.5	5.9	621.9	7.5	669	22	621.9	7.5	1.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY01_24	55.70	0.66	0.86600	0.01500	0.09650	0.00120	0.41982	633.5	8.4	593.9	7.2	756	35	593.9	7.2	6.3	Single Age
13WPY01_25	85.00	1.08	11.38000	0.10000	0.46680	0.00500	0.70295	2554.2	8.6	2469.0	22.0	2627	13	2627.0	13.0	6.0	Single Age
13WPY01_26	41.50	0.96	0.83000	0.01700	0.09900	0.00180	0.37677	612.6	9.3	608.0	10.0	614	45	608.0	10.0	0.8	Single Age
13WPY01_27	68.30	0.64	10.21000	0.11000	0.41960	0.00550	0.71952	2452.7	9.6	2258.0	25.0	2612	16	2612.0	16.0	13.6	Single Age
13WPY01_28	105.70	1.05	0.78400	0.01100	0.09290	0.00100	0.32987	588.0	6.3	572.6	5.9	657	31	572.6	5.9	2.6	Single Age
13WPY01_29	225.30	1.63	2.72300	0.02100	0.22490	0.00200	0.65207	1334.5	5.8	1307.0	10.0	1375	13	1375.0	13.0	4.9	Single Age
13WPY01_30	123.50	0.76	0.82400	0.01200	0.09731	0.00075	0.12890	610.0	6.4	598.6	4.4	649	30	598.6	4.4	1.9	Single Age
13WPY01_31	310.30	24.30	0.87700	0.04100	0.10040	0.00330	0.80885	639.0	22.0	617.0	19.0	697	58	617.0	19.0	3.4	Rim
13WPY01_31	190.00	0.83	1.68300	0.01700	0.16630	0.00140	0.44254	1003.2	6.0	991.8	7.9	1028	18	991.8	7.9	1.1	Core
13WPY01_32	195.00	3.14	2.32200	0.02600	0.20370	0.00230	0.76912	1219.5	8.2	1195.0	13.0	1244	17	1195.0	13.0	2.0	Single Age
13WPY01_33	107.00	1.07	0.80280	0.00810	0.09503	0.00086	0.13442	598.2	4.6	585.2	5.1	646	31	585.2	5.1	2.2	Single Age
13WPY01_34	173.00	1.46	0.68200	0.02300	0.07645	0.00092	0.14206	526.0	14.0	474.9	5.5	754	74	474.9	5.5	9.7	Single Age
13WPY01_35	301.30	1.03	0.92760	0.00800	0.10776	0.00096	0.51094	666.9	4.1	659.7	5.6	681	18	659.7	5.6	1.1	Single Age
13WPY01_36	367.00	0.81	1.48500	0.01100	0.14970	0.00140	0.63988	924.9	4.4	899.2	7.8	981	14	899.2	7.8	2.8	Single Age
13WPY01_37	26.00	0.87	18.67000	0.20000	0.60280	0.00800	0.71322	3024.0	10.0	3040.0	32.0	3012	17	3012.0	17.0	0.9	Single Age
13WPY01_38	120.00	2.49	0.97300	0.05500	0.11280	0.00440	0.82827	694.0	30.0	689.0	26.0	684	72	689.0	26.0	0.7	Rim
13WPY01_38	165.00	1.70	4.50100	0.07800	0.27130	0.00520	0.90878	1731.0	14.0	1553.0	25.0	1954	15	1954.0	15.0	20.5	Core
13WPY01_39	1310.00	211.00	0.86400	0.01300	0.10030	0.00230	0.12410	632.4	7.1	616.0	13.0	664	61	616.0	13.0	2.6	Rim
13WPY01_39	91.70	0.72	1.54400	0.01900	0.15790	0.00170	0.58354	947.5	7.6	944.8	9.3	953	22	944.8	9.3	0.3	Core
13WPY01_40	104.60	0.86	6.58300	0.05200	0.36280	0.00330	0.78241	2056.6	7.0	1995.0	16.0	2119	13	2119.0	13.0	5.9	Single Age
13WPY01_41	79.90	2.40	0.90300	0.01300	0.10500	0.00100	0.73940	652.7	6.8	643.7	6.0	672	29	643.7	6.0	1.4	Single Age
13WPY01_42	71.30	2.23	0.92200	0.01400	0.10730	0.00120	0.10937	663.0	7.2	656.8	7.0	690	37	656.8	7.0	0.9	Single Age
13WPY01_43	20.94	0.30	0.87900	0.02700	0.10340	0.00160	0.08300	639.0	15.0	634.0	9.6	660	68	634.0	9.6	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY01_44	58.00	0.89	11.30000	0.14000	0.45920	0.00470	0.80550	2553.0	11.0	2435.0	21.0	2632	14	2632.0	14.0	7.5	Single Age
13WPY01_45	709.00	62.20	0.40090	0.00360	0.05414	0.00053	0.51625	342.2	2.6	339.9	3.2	348	20	339.9	3.2	0.7	Single Age
13WPY01_46	277.30	1.28	1.45900	0.01100	0.15250	0.00110	0.27971	913.3	4.5	915.0	6.3	904	17	915.0	6.3	0.2	Single Age
13WPY01_47	131.50	0.72	5.83800	0.05700	0.34890	0.00340	0.73088	1951.4	8.4	1929.0	16.0	1968	13	1968.0	13.0	2.0	Single Age
13WPY01_48	443.00	4.99	13.72000	0.25000	0.47240	0.00720	0.85473	2730.0	17.0	2493.0	32.0	2880	16	2880.0	16.0	13.4	Single Age
13WPY01_49	178.50	0.79	1.12000	0.10000	0.09950	0.00140	0.46291	744.0	45.0	611.6	8.1	1150	150	DISC	DISC	17.8	Single Age
13WPY01_50	30.80	0.79	1.58000	0.02900	0.15620	0.00270	0.51104	963.0	11.0	937.0	15.0	1024	33	937.0	15.0	2.7	Single Age
13WPY01_51	44.82	0.88	0.94100	0.01800	0.10270	0.00150	0.35940	673.9	9.6	631.1	8.4	813	41	631.1	8.4	6.4	Single Age
13WPY01_52	226.00	1.55	7.51300	0.05700	0.39400	0.00390	0.65065	2174.2	6.8	2141.0	18.0	2211	12	2211.0	12.0	3.2	Single Age
13WPY01_53	129.00	2.74	0.96100	0.01500	0.11150	0.00140	0.76541	683.1	7.9	681.1	8.1	682	23	681.1	8.1	0.3	Single Age
13WPY01_54	106.30	0.56	1.75200	0.02000	0.17190	0.00150	0.18478	1028.7	7.2	1022.4	8.4	1037	29	1022.4	8.4	0.6	Single Age
13WPY01_55	174.00	1.40	0.98000	0.01600	0.11470	0.00140	0.73178	694.9	7.9	700.0	8.0	658	19	700.0	8.0	0.7	Single Age
13WPY01_56	108.00	1.07	0.61100	0.01000	0.07830	0.00110	0.43355	484.0	6.5	486.0	6.8	467	40	486.0	6.8	0.4	Single Age
13WPY01_57	510.00	1.94	0.91100	0.02500	0.10750	0.00310	0.94366	656.0	14.0	658.0	18.0	660	23	658.0	18.0	0.3	Single Age
13WPY01_58	218.00	3.14	0.54820	0.00680	0.07071	0.00067	0.12687	444.3	4.6	440.4	4.0	470	31	440.4	4.0	0.9	Single Age
13WPY01_59	686.00	1.79	0.72560	0.00790	0.08880	0.00120	0.72028	553.7	4.6	548.3	7.2	574	23	548.3	7.2	1.0	Single Age
13WPY01_68	127.00	2.08	0.93900	0.01400	0.10750	0.00110	0.38760	672.8	7.3	658.2	6.6	718	30	658.2	6.6	2.2	Single Age
13WPY01_69	227.00	2.78	6.88000	0.13000	0.38010	0.00530	0.82672	2096.0	16.0	2076.0	25.0	2103	18	2103.0	18.0	1.3	Single Age
13WPY01_70	380.70	0.30	0.84430	0.00580	0.10054	0.00060	0.45031	621.4	3.2	617.5	3.5	619	15	617.5	3.5	0.6	Single Age
13WPY01_71	1044.00	3.48	9.42000	0.10000	0.35150	0.00480	0.86341	2379.1	9.8	1941.0	23.0	2743	11	2743.0	11.0	29.2	Single Age
13WPY01_72	473.00	1.38	0.68650	0.00860	0.08250	0.00100	0.71498	531.1	5.2	511.1	6.2	594	19	511.1	6.2	3.8	Single Age
13WPY01_73	325.00	1.04	11.14000	0.11000	0.45590	0.00440	0.87198	2533.9	8.8	2421.0	19.0	2624	10	2624.0	10.0	7.7	Single Age
13WPY01_74	244.00	0.97	0.82500	0.01000	0.09530	0.00120	0.54484	610.3	5.8	586.7	6.9	685	27	586.7	6.9	3.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY01_75	130.70	1.50	1.13200	0.01500	0.12570	0.00160	0.41325	768.2	7.2	762.9	8.9	772	28	762.9	8.9	0.7	Single Age
13WPY01_76	320.00	0.64	0.86410	0.00750	0.10169	0.00070	0.56851	632.2	4.1	624.3	4.1	653	15	624.3	4.1	1.2	Single Age
13WPY01_77	137.80	1.10	0.81400	0.01100	0.09830	0.00110	0.32932	604.5	6.1	604.2	6.7	616	33	604.2	6.7	0.0	Single Age
13WPY01_78	92.40	1.49	1.58700	0.01700	0.16000	0.00140	0.31368	964.7	6.8	956.9	7.7	987	26	956.9	7.7	0.8	Single Age
13WPY01_79	289.70	2.72	0.79000	0.02300	0.08830	0.00240	0.82030	591.0	13.0	545.0	14.0	764	37	545.0	14.0	7.8	Single Age
13WPY01_80	77.00	0.53	1.77800	0.06000	0.16800	0.00370	0.71872	1033.0	21.0	1001.0	21.0	1105	45	1001.0	21.0	3.1	Single Age
13WPY01_81	149.00	0.99	12.28000	0.27000	0.48370	0.00860	0.94244	2624.0	21.0	2542.0	37.0	2658	18	2658.0	18.0	4.4	Single Age
13WPY01_82	761.00	7.15	1.57100	0.01400	0.15850	0.00160	0.75266	959.1	5.5	948.4	8.7	983	14	948.4	8.7	1.1	Single Age
13WPY01_83	68.30	2.81	0.92100	0.01400	0.10700	0.00140	0.31468	663.3	7.3	656.4	8.1	676	33	656.4	8.1	1.0	Single Age
13WPY01_84	211.00	4.97	1.83800	0.02600	0.17980	0.00250	0.90243	1058.4	9.2	1066.0	14.0	1036	21	1066.0	14.0	0.7	Single Age
13WPY01_85	158.00	0.91	1.53300	0.06700	0.14610	0.00290	0.73732	938.0	26.0	879.0	16.0	1091	59	879.0	16.0	6.3	Single Age
13WPY01_86	71.00	1.21	1.77700	0.02800	0.17240	0.00270	0.61681	1039.0	10.0	1025.0	15.0	1051	30	1025.0	15.0	1.3	Single Age
13WPY01_87	247.00	1.21	3.88700	0.06600	0.26600	0.00430	0.85387	1610.0	14.0	1520.0	22.0	1719	19	1719.0	19.0	11.6	Single Age
13WPY01_88	143.20	1.02	1.35600	0.01800	0.14040	0.00140	0.75379	869.6	7.7	846.8	8.0	920	15	846.8	8.0	2.6	Single Age
13WPY01_89	137.10	2.19	0.84300	0.01000	0.10130	0.00120	0.46024	620.7	5.7	621.9	7.0	627	28	621.9	7.0	0.2	Single Age
13WPY01_90	16.14	0.51	1.62500	0.03300	0.16030	0.00270	0.12604	980.0	13.0	960.0	15.0	1010	53	960.0	15.0	2.0	Single Age
13WPY01_91	743.00	3.73	0.32510	0.00470	0.04380	0.00094	0.78939	285.7	3.6	276.3	5.8	387	27	276.3	5.8	3.3	Single Age
13WPY01_92	405.00	0.35	0.83460	0.00670	0.09977	0.00075	0.38663	616.1	3.7	613.0	4.4	634	20	613.0	4.4	0.5	Single Age
13WPY01_93	93.80	1.73	0.87100	0.01200	0.10310	0.00120	0.33124	636.6	6.4	632.8	7.2	656	32	632.8	7.2	0.6	Single Age
13WPY01_94	94.80	2.89	3.42500	0.08200	0.21490	0.00440	0.92352	1507.0	19.0	1254.0	24.0	1886	18	DISC	DISC	33.5	Single Age
13WPY01_95	83.65	0.96	1.19700	0.01800	0.13150	0.00150	0.60861	801.0	8.4	796.6	8.8	828	25	796.6	8.8	0.5	Single Age
13WPY01_96	119.00	1.65	6.26600	0.09200	0.36700	0.00450	0.84500	2012.0	13.0	2015.0	21.0	2014	17	2014.0	17.0	0.0	Single Age
13WPY01_97	283.00	2.91	0.77600	0.01100	0.09260	0.00110	0.90790	582.8	6.3	571.0	6.3	652	17	571.0	6.3	2.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY01_98	196.90	1.97	0.87660	0.00950	0.10420	0.00100	0.57802	638.9	5.2	638.7	6.0	641	23	638.7	6.0	0.0	Single Age
13WPY01_99	1038.00	1.21	0.36450	0.00630	0.04720	0.00110	0.90030	315.4	4.7	297.5	6.8	460	22	297.5	6.8	5.7	Single Age
13WPY01_100	71.80	0.82	6.92000	0.19000	0.38640	0.00740	0.91522	2098.0	24.0	2104.0	34.0	2099	21	2099.0	21.0	0.2	Single Age
13WPY01_101	38.87	0.92	1.00900	0.02000	0.11160	0.00170	0.52024	708.0	10.0	682.0	10.0	818	37	682.0	10.0	3.7	Single Age
13WPY01_102	7.08	1.11	0.82300	0.04600	0.09630	0.00340	0.18084	606.0	26.0	592.0	20.0	620	140	592.0	20.0	2.3	Single Age
13WPY01_103	369.00	46.40	0.80700	0.02700	0.09860	0.00260	0.66133	600.0	15.0	606.0	15.0	584	64	606.0	15.0	1.0	Rim
13WPY01_103	247.30	1.68	1.64300	0.03200	0.16380	0.00300	0.66362	986.0	12.0	980.0	16.0	1011	28	980.0	16.0	0.6	Core
13WPY01_104	638.00	4.94	0.78700	0.00640	0.09381	0.00080	0.72555	589.3	3.6	578.0	4.7	642	13	578.0	4.7	1.9	Single Age
13WPY01_105	315.00	1.35	0.73910	0.00690	0.09043	0.00097	0.28777	561.7	4.0	558.1	5.7	592	23	558.1	5.7	0.6	Single Age
13WPY01_106	129.00	0.75	1.46000	0.01600	0.15030	0.00140	0.31426	913.6	6.6	902.4	8.0	933	23	902.4	8.0	1.2	Single Age
13WPY01_107	51.90	0.51	0.73600	0.01200	0.09070	0.00150	0.22505	560.8	7.2	559.9	8.8	569	44	559.9	8.8	0.2	Single Age
13WPY01_108	286.00	2.07	0.77490	0.00630	0.09357	0.00081	0.47934	582.5	3.6	576.6	4.8	608	19	576.6	4.8	1.0	Single Age
13WPY01_109	165.10	1.20	0.95200	0.01100	0.11020	0.00120	0.66130	678.9	5.6	673.9	6.8	702	21	673.9	6.8	0.7	Single Age
13WPY01_110	590.00	1.40	0.74100	0.00800	0.09000	0.00110	0.67272	562.8	4.7	555.4	6.4	613	20	555.4	6.4	1.3	Single Age
13WPY01_111	433.00	8.84	1.29200	0.01300	0.13510	0.00140	0.72035	841.7	5.9	817.1	8.1	897	16	817.1	8.1	2.9	Single Age
13WPY01_112	449.00	1.98	0.78400	0.01300	0.09310	0.00170	0.89022	587.3	7.5	573.7	9.9	647	19	573.7	9.9	2.3	Single Age
13WPY01_113	26.40	0.26	1.96900	0.07600	0.17130	0.00380	0.38763	1100.0	24.0	1019.0	21.0	1278	78	1019.0	21.0	7.4	Single Age
13WPY01_114	710.00	2.35	0.82800	0.01100	0.09830	0.00150	0.82750	613.0	6.0	604.5	8.5	636	18	604.5	8.5	1.4	Single Age
13WPY01_115	256.70	5.93	0.81300	0.00810	0.09690	0.00100	0.57076	604.0	4.6	596.4	6.0	633	20	596.4	6.0	1.3	Single Age
13WPY01_116	65.40	0.81	7.75600	0.07800	0.37260	0.00440	0.72203	2203.7	8.9	2041.0	21.0	2358	17	2358.0	17.0	13.4	Single Age
13WPY01_117	145.00	1.06	0.85700	0.01700	0.10180	0.00180	0.70946	627.8	9.0	625.0	11.0	649	27	625.0	11.0	0.4	Single Age
13WPY01_119	110.50	0.85	0.75200	0.01200	0.09060	0.00140	0.62779	569.3	6.9	559.3	8.5	598	34	559.3	8.5	1.8	Single Age
13WPY01_120	330.50	5.48	0.79460	0.00730	0.09421	0.00082	0.62449	593.6	4.1	581.0	4.9	627	16	581.0	4.9	2.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY01_121	732.00	8.08	0.85720	0.00930	0.09964	0.00094	0.78220	628.4	5.1	612.3	5.5	679	14	612.3	5.5	2.6	Single Age
13WPY01_122	414.00	1.63	0.78520	0.00650	0.09518	0.00089	0.64672	588.3	3.7	586.1	5.2	586	17	586.1	5.2	0.4	Single Age
13WPY01_123	148.80	2.39	0.58670	0.00710	0.07412	0.00081	0.49478	468.6	4.6	460.9	4.9	492	23	460.9	4.9	1.6	Single Age
13WPY01_124	31.76	0.85	4.21700	0.05800	0.28830	0.00400	0.57813	1676.0	11.0	1633.0	20.0	1740	23	1740.0	23.0	6.1	Single Age

Cretaceous strata U-Pb data

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY07_1	392.00	0.84	0.86700	0.01000	0.10277	0.00094	0.55568	633.4	5.6	630.6	5.5	645	21	630.6	5.5	0.4	Single Age
12WPY07_2	81.80	2.00	5.27000	0.10000	0.29730	0.00610	0.96249	1862.0	17.0	1677.0	30.0	2074	13	2074.0	13.0	19.1	Single Age
12WPY07_3	204.00	4.31	5.61000	0.14000	0.33090	0.00700	0.81026	1918.0	22.0	1841.0	34.0	2000	22	2000.0	22.0	8.0	Single Age
12WPY07_4	578.00	19.10	3.55000	0.10000	0.19050	0.00490	0.67619	1538.0	22.0	1124.0	26.0	2164	42	DISC	DISC	26.9	Rim
12WPY07_4	307.00	1.70	7.93700	0.08300	0.34040	0.00330	0.89759	2223.2	9.5	1888.0	16.0	2552	8	2551.5	7.7	26.0	Core
12WPY07_5	25.08	2.35	0.95100	0.02600	0.10270	0.00160	0.24723	677.0	14.0	630.4	9.6	834	54	630.4	9.6	6.9	Single Age
12WPY07_6	57.30	0.85	1.67000	0.02200	0.16800	0.00200	0.38257	996.6	8.4	1001.0	11.0	1000	26	1001.0	11.0	0.4	Single Age
12WPY07_7	347.00	1.04	0.88700	0.01100	0.10450	0.00120	0.67145	644.9	6.0	640.7	7.1	667	20	640.7	7.1	0.7	Single Age
12WPY07_8	169.00	1.10	1.33200	0.01600	0.14190	0.00140	0.60172	859.4	7.0	855.1	7.7	860	22	855.1	7.7	0.5	Single Age
12WPY07_9	112.30	1.11	0.98500	0.01900	0.09990	0.00130	0.59289	696.5	9.7	613.7	7.4	957	27	DISC	DISC	11.9	Single Age
12WPY07_10	537.00	3.13	1.08200	0.04600	0.10000	0.00300	0.52066	747.0	22.0	614.0	17.0	1122	81	DISC	DISC	17.8	Rim
12WPY07_10	162.30	1.25	1.53400	0.02600	0.15140	0.00230	0.45191	945.6	9.5	909.0	13.0	1024	34	909.0	13.0	3.9	Core
12WPY07_11	169.00	0.89	0.93000	0.01000	0.10862	0.00083	0.29956	667.4	5.4	664.7	4.9	673	24	664.7	4.9	0.4	Single Age
12WPY07_16	395.00	1.94	0.80570	0.00760	0.09565	0.00069	0.55349	599.9	4.3	588.8	4.1	633	18	588.8	4.1	1.9	Single Age
12WPY07_17	33.90	1.15	0.77500	0.02600	0.08720	0.00280	0.40124	581.0	15.0	539.0	17.0	693	78	539.0	17.0	7.2	Single Age
12WPY07_18	85.00	1.13	7.44000	0.18000	0.33240	0.00910	0.78856	2163.0	22.0	1847.0	44.0	2471	14	2471.0	14.0	25.3	Single Age
12WPY07_21	73.90	1.10	0.94100	0.02700	0.11030	0.00390	0.50210	671.0	14.0	677.0	23.0	660	68	677.0	23.0	0.9	Single Age
12WPY07_23	286.00	3.72	0.75600	0.02500	0.09140	0.00230	0.57836	571.0	15.0	564.0	14.0	634	51	564.0	14.0	1.2	Rim
12WPY07_23	135.00	1.65	1.36600	0.02100	0.14370	0.00240	0.76469	873.8	9.0	865.0	14.0	894	24	865.0	14.0	1.0	Core
12WPY07_24	158.00	1.88	1.21600	0.05900	0.10870	0.00200	0.38048	807.0	27.0	665.0	12.0	1138	90	DISC	DISC	17.6	Single Age
12WPY07_25	153.60	0.85	10.79000	0.07800	0.46150	0.00350	0.74259	2504.8	6.7	2446.0	15.0	2550	9	2550.4	9.4	4.1	Single Age
12WPY07_26	659.00	1.08	1.56920	0.00980	0.15680	0.00110	0.56569	958.0	3.9	939.1	6.3	990	14	939.1	6.3	2.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY07_27	434.00	29.40	1.60000	0.03200	0.15650	0.00410	0.74700	970.0	12.0	937.0	23.0	1038	29	937.0	23.0	3.4	Rim
12WPY07_27	373.00	1.39	3.18700	0.04900	0.24800	0.00320	0.84268	1453.0	12.0	1428.0	17.0	1496	16	1496.0	16.0	4.5	Core
12WPY07_28	97.10	2.01	0.82700	0.01100	0.09517	0.00095	0.27100	611.3	6.1	586.0	5.6	685	30	586.0	5.6	4.1	Single Age
12WPY07_29	68.00	1.53	1.27500	0.01800	0.13470	0.00140	0.35282	833.8	8.0	814.7	8.2	885	30	814.7	8.2	2.3	Single Age
12WPY07_31	564.00	6.85	0.92000	0.01200	0.09950	0.00120	0.23944	662.0	6.1	611.1	6.9	844	35	611.1	6.9	7.7	Single Age
12WPY07_32	63.30	0.36	4.87100	0.09500	0.27740	0.00870	0.34800	1799.0	16.0	1575.0	44.0	2023	45	2023.0	45.0	22.1	Single Age
12WPY07_33	670.00	1.61	1.46500	0.01100	0.14750	0.00092	0.66435	916.0	4.6	886.9	5.2	983	14	886.9	5.2	3.2	Single Age
12WPY07_34	406.00	3.32	12.00100	0.09000	0.49100	0.00410	0.81902	2604.1	6.9	2577.0	18.0	2621	11	2621.0	11.0	1.7	Single Age
12WPY07_36	102.80	2.29	1.01900	0.01300	0.11171	0.00096	0.30820	713.0	6.7	682.7	5.6	810	27	682.7	5.6	4.2	Single Age
12WPY07_37	294.00	2.76	0.77200	0.01600	0.09450	0.00240	0.81354	579.9	9.0	582.0	14.0	585	35	582.0	14.0	0.4	Single Age
12WPY07_38	851.00	2.78	0.79400	0.01100	0.09030	0.00100	0.40440	593.0	5.9	557.0	6.1	744	26	557.0	6.1	6.1	Single Age
12WPY07_39	354.00	5.20	1.70300	0.09600	0.14820	0.00420	0.97548	1003.0	37.0	890.0	24.0	1263	62	DISC	DISC	11.3	Single Age
12WPY07_40	833.00	2.78	1.56700	0.09600	0.13040	0.00340	0.78697	950.0	35.0	792.0	20.0	1403	88	DISC	DISC	16.6	Single Age
12WPY07_41	236.00	5.49	5.98400	0.05700	0.34340	0.00330	0.75801	1974.3	8.6	1903.0	16.0	2045	14	2045.0	14.0	6.9	Single Age
12WPY07_42	694.00	3.88	1.31900	0.07400	0.12550	0.00360	0.71185	853.0	31.0	762.0	21.0	1141	80	DISC	DISC	10.7	Single Age
12WPY07_43	411.00	1.72	1.00200	0.00810	0.11620	0.00110	0.64642	704.6	4.1	708.6	6.1	702	16	708.6	6.1	0.6	Single Age
12WPY07_44	41.70	1.19	1.68700	0.02900	0.16850	0.00210	0.30193	1002.0	11.0	1004.0	12.0	1010	36	1004.0	12.0	0.2	Single Age
12WPY07_45	259.80	0.64	0.82500	0.01100	0.09880	0.00140	0.84322	610.8	6.0	607.1	8.1	643	21	607.1	8.1	0.6	Single Age
12WPY07_46	1489.00	1.66	0.93700	0.01800	0.08330	0.00160	0.45792	670.4	9.5	515.5	9.2	1230	37	DISC	DISC	23.1	Single Age
12WPY07_47	400.00	6.70	0.63800	0.04000	0.08080	0.00340	0.87298	500.0	25.0	501.0	20.0	533	72	501.0	20.0	0.2	Rim
12WPY07_47	436.60	1.62	1.47200	0.02500	0.14770	0.00230	0.90227	918.0	10.0	888.0	13.0	997	16	888.0	13.0	3.3	Core
12WPY07_48	112.60	0.79	0.82200	0.02200	0.09710	0.00170	0.07268	608.0	12.0	597.2	9.7	617	53	597.2	9.7	1.8	Single Age
12WPY07_50	215.00	11.20	0.70800	0.01400	0.08650	0.00100	0.29005	543.4	8.4	534.5	6.2	585	43	534.5	6.2	1.6	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY07_50	120.30	1.79	1.06600	0.03900	0.11860	0.00320	0.76987	735.0	19.0	722.0	18.0	808	48	722.0	18.0	1.8	Core
12WPY07_51	133.50	0.63	6.35600	0.05300	0.36110	0.00330	0.73681	2025.7	7.4	1989.0	16.0	2060	12	2060.0	12.0	3.4	Single Age
12WPY07_52	212.50	3.39	0.71000	0.04600	0.08610	0.00340	0.55887	544.0	27.0	532.0	20.0	600	110	532.0	20.0	2.2	Rim
12WPY07_52	114.00	0.72	1.48100	0.02200	0.15210	0.00180	0.62624	921.9	9.0	913.0	10.0	947	26	913.0	10.0	1.0	Core
12WPY07_53	509.00	13.40	1.09800	0.07700	0.11190	0.00370	0.88123	749.0	37.0	684.0	21.0	945	91	684.0	21.0	8.7	Rim
12WPY07_53	92.70	0.41	4.72400	0.06200	0.30380	0.00320	0.80807	1771.0	11.0	1710.0	16.0	1854	18	1854.0	18.0	7.8	Core
12WPY07_54	303.00	5.28	0.35750	0.00520	0.04893	0.00048	0.44275	310.2	3.9	307.9	2.9	345	34	307.9	2.9	0.7	Single Age
12WPY07_56	170.00	1.81	0.61150	0.00740	0.07760	0.00062	0.25330	485.0	4.8	481.7	3.7	510	28	481.7	3.7	0.7	Single Age
12WPY07_57	211.40	1.52	1.53200	0.02200	0.15380	0.00280	0.63099	942.4	8.9	922.0	16.0	1002	28	922.0	16.0	2.2	Single Age
12WPY07_58	150.00	0.99	0.80500	0.01100	0.09671	0.00094	0.35291	599.2	6.1	595.1	5.6	603	30	595.1	5.6	0.7	Single Age
12WPY07_59	108.70	0.86	9.32200	0.07800	0.41830	0.00310	0.72740	2370.6	7.8	2252.0	14.0	2473	10	2472.9	9.9	8.9	Single Age
12WPY07_60	75.70	0.72	1.02000	0.04400	0.09960	0.00270	0.58003	710.0	20.0	612.0	16.0	1067	54	DISC	DISC	13.8	Single Age
12WPY07_61	237.00	7.61	0.66400	0.03200	0.08040	0.00230	0.62000	516.0	19.0	498.0	13.0	603	89	498.0	13.0	3.5	Rim
12WPY07_61	151.00	1.98	2.63600	0.07100	0.17630	0.00300	0.89420	1309.0	20.0	1047.0	16.0	1780	23	DISC	DISC	20.0	Core
12WPY07_62	103.10	1.13	0.61100	0.01000	0.07242	0.00089	0.30205	483.8	6.6	450.7	5.3	643	41	450.7	5.3	6.8	Single Age
12WPY07_63	112.80	1.72	0.90200	0.02300	0.09830	0.00160	0.50261	654.0	11.0	604.4	9.5	830	40	604.4	9.5	7.6	Single Age
12WPY07_64	525.00	1.03	6.49000	0.14000	0.32880	0.00520	0.81533	2045.0	19.0	1832.0	25.0	2266	23	2266.0	23.0	19.2	Single Age
12WPY07_65	186.30	2.05	1.48000	0.03200	0.14940	0.00280	0.88015	921.0	13.0	897.0	16.0	992	18	897.0	16.0	2.6	Single Age
12WPY07_66	101.00	3.27	0.96300	0.01700	0.11220	0.00170	0.53097	684.1	8.7	685.1	9.8	713	32	685.1	9.8	0.1	Single Age
12WPY07_67	44.60	0.68	3.04300	0.04100	0.24170	0.00280	0.68681	1417.0	10.0	1395.0	14.0	1458	25	1458.0	25.0	4.3	Single Age
12WPY07_68	118.50	0.71	1.71200	0.02100	0.16920	0.00230	0.64311	1013.3	7.7	1009.0	12.0	1028	23	1009.0	12.0	0.4	Single Age
12WPY07_69	208.00	1.67	3.28600	0.07200	0.21550	0.00360	0.94283	1475.0	18.0	1258.0	19.0	1804	19	DISC	DISC	30.3	Single Age
12WPY07_71	332.00	18.70	1.03100	0.06100	0.10580	0.00350	0.75447	711.0	29.0	648.0	20.0	913	65	648.0	20.0	8.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY07_72	202.00	1.03	1.43100	0.02600	0.14510	0.00220	0.81430	902.0	11.0	873.0	13.0	970	21	873.0	13.0	3.2	Single Age
12WPY07_73	491.00	16.10	0.85400	0.01300	0.09750	0.00150	0.40939	626.4	7.1	599.8	9.0	682	34	599.8	9.0	4.2	Single Age
12WPY07_74	187.00	5.70	1.71200	0.06200	0.16770	0.00440	0.72059	1011.0	23.0	999.0	24.0	1029	62	999.0	24.0	1.2	Single Age
12WPY07_75	90.90	0.45	1.61300	0.01900	0.16070	0.00200	0.55891	975.8	7.7	960.0	11.0	1028	24	960.0	11.0	1.6	Single Age
12WPY07_76	325.00	0.59	1.68000	0.08500	0.12020	0.00110	0.00003	991.0	32.0	731.9	6.2	1592	95	DISC	DISC	26.1	Single Age
12WPY07_77	417.00	14.00	0.85200	0.01800	0.09950	0.00170	0.89111	626.0	10.0	611.0	10.0	685	25	611.0	10.0	2.4	Single Age
12WPY07_78	255.00	1.33	0.90400	0.05300	0.09840	0.00120	0.51115	648.0	24.0	606.1	6.8	765	78	606.1	6.8	6.5	Single Age
12WPY07_79	378.90	0.98	0.82900	0.01100	0.09980	0.00130	0.75427	612.9	5.9	613.0	7.3	614	18	613.0	7.3	0.0	Single Age
12WPY07_80	928.00	1.10	0.54700	0.01800	0.05910	0.00280	0.89293	443.0	12.0	370.0	17.0	854	42	DISC	DISC	16.5	Single Age
12WPY07_81	27.24	0.50	0.98000	0.13000	0.08960	0.00140	0.28256	643.0	14.0	553.1	8.0	975	66	DISC	DISC	14.0	Single Age
12WPY07_82	382.00	3.81	2.88000	0.07900	0.18630	0.00400	0.89270	1375.0	20.0	1101.0	22.0	1829	25	DISC	DISC	19.9	Single Age
12WPY07_84	379.00	2.45	0.37800	0.01000	0.04676	0.00053	0.14147	324.9	7.3	294.6	3.2	536	46	294.6	3.2	9.3	Single Age
12WPY07_85	567.00	5.95	0.57700	0.02000	0.05810	0.00340	0.77583	461.0	13.0	366.0	20.0	1021	68	DISC	DISC	20.6	Single Age
12WPY07_86	125.50	2.94	0.93000	0.01700	0.10380	0.00130	0.40478	669.3	8.3	636.5	7.5	770	34	636.5	7.5	4.9	Single Age
12WPY07_87	74.30	1.18	1.19200	0.01800	0.12850	0.00220	0.51940	796.0	8.4	779.0	12.0	851	34	779.0	12.0	2.1	Single Age
12WPY07_88	96.70	1.08	1.13000	0.01800	0.11680	0.00160	0.77164	768.3	8.3	711.8	9.2	920	23	711.8	9.2	7.4	Single Age
12WPY07_89	871.00	8.44	0.57320	0.00830	0.06290	0.00100	0.51572	460.0	5.3	393.2	6.1	801	34	DISC	DISC	14.5	Rim
12WPY07_89	286.00	18.20	0.94500	0.02700	0.09820	0.00230	0.85880	675.0	14.0	604.0	13.0	918	29	DISC	DISC	10.5	Core
12WPY07_90	177.00	2.02	5.90100	0.04000	0.34170	0.00210	0.46246	1962.1	5.7	1894.5	9.9	2035	10	2035.0	10.0	6.9	Single Age
12WPY07_91	130.90	1.28	11.39900	0.08800	0.46810	0.00430	0.89819	2554.1	7.9	2477.0	20.0	2614	12	2614.0	12.0	5.2	Single Age
12WPY07_92	857.00	1.55	0.48800	0.01600	0.05310	0.00180	0.87316	405.0	11.0	334.0	11.0	894	32	DISC	DISC	17.5	Single Age
12WPY07_93	192.00	0.86	1.53900	0.07900	0.09240	0.00410	0.16465	945.0	32.0	570.0	24.0	1960	110	DISC	DISC	39.7	Rim
12WPY07_93	38.19	0.78	1.87500	0.06000	0.15930	0.00250	0.42555	1069.0	20.0	953.0	14.0	1320	60	DISC	DISC	10.9	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY07_94	655.00	6.01	2.13400	0.08900	0.17930	0.00590	0.84552	1155.0	29.0	1066.0	32.0	1373	39	1066.0	32.0	7.7	Single Age
12WPY07_95	142.60	1.29	1.53000	0.01600	0.15320	0.00130	0.67604	942.0	6.4	918.9	7.1	986	19	918.9	7.1	2.5	Single Age
12WPY07_96	128.00	0.96	11.62000	0.25000	0.46300	0.00980	0.96334	2571.0	21.0	2450.0	44.0	2662	14	2662.0	14.0	8.0	Single Age
12WPY07_97	737.00	7.89	5.65300	0.03300	0.33790	0.00250	0.72303	1923.9	5.0	1876.0	12.0	1976	10	1976.0	10.0	5.1	Single Age
12WPY07_98	1.21	0.06	104.800	4.90000	0.94500	0.05400	0.62668	4726.0	46.0	4340.0	180.0	4997	84	4997.0	84.0	13.1	Single Age
12WPY07_99	31.14	0.49	8.03000	0.33000	0.35750	0.00990	0.92044	2225.0	38.0	1967.0	47.0	2471	31	2471.0	31.0	20.4	Single Age
12WPY07_100	114.00	1.53	1.53200	0.02000	0.15260	0.00180	0.58865	942.8	7.9	915.0	10.0	1002	23	915.0	10.0	2.9	Single Age
12WPY07_101	680.00	4.24	0.69500	0.01300	0.08146	0.00072	0.10446	535.2	7.6	504.8	4.3	670	44	504.8	4.3	5.7	Single Age
12WPY07_102	218.00	3.57	1.00200	0.02700	0.11160	0.00230	0.79960	704.0	13.0	681.0	14.0	765	31	681.0	14.0	3.3	Single Age
12WPY07_103	730.00	1.26	1.06900	0.02700	0.09060	0.00350	0.06579	738.0	13.0	559.0	20.0	1302	66	DISC	DISC	24.3	Rim
12WPY07_103	55.00	0.52	1.55900	0.02700	0.15180	0.00230	0.50220	953.0	11.0	911.0	13.0	1049	32	911.0	13.0	4.4	Core
12WPY07_104	193.00	17.50	0.81800	0.07600	0.10090	0.00520	0.41030	606.0	42.0	620.0	30.0	550	170	620.0	30.0	2.3	Rim
12WPY07_104	324.30	1.43	1.16600	0.01400	0.12630	0.00110	0.24998	784.5	6.4	766.6	6.6	839	20	766.6	6.6	2.3	Core
12WPY07_105	1469.00	108.00	1.01700	0.03200	0.10910	0.00400	0.55206	712.0	16.0	667.0	23.0	855	70	667.0	23.0	6.3	Rim
12WPY07_105	227.00	2.48	11.64000	0.13000	0.47460	0.00560	0.81897	2575.0	10.0	2506.0	25.0	2627	12	2627.0	12.0	4.6	Core
12WPY07_106	414.00	2.17	0.64100	0.02600	0.07210	0.00190	0.49259	497.0	14.0	448.0	12.0	725	32	448.0	12.0	9.9	Single Age
12WPY07_107	474.00	4.59	0.85050	0.00640	0.10004	0.00082	0.22667	624.8	3.5	614.6	4.8	674	21	614.6	4.8	1.6	Single Age
12WPY07_108	113.70	1.12	0.72820	0.00920	0.09060	0.00088	0.35514	555.2	5.4	559.0	5.2	539	30	559.0	5.2	0.7	Single Age
12WPY07_109	263.00	5.92	0.94400	0.01000	0.11107	0.00093	0.56115	675.2	5.1	678.9	5.4	659	20	678.9	5.4	0.5	Single Age
12WPY07_110	121.90	1.29	1.69100	0.02100	0.16760	0.00150	0.30157	1004.7	7.8	999.0	8.4	1020	27	999.0	8.4	0.6	Single Age
12WPY07_111	168.00	2.18	0.75800	0.01700	0.09010	0.00140	0.73158	572.0	10.0	555.8	8.4	627	31	555.8	8.4	2.8	Single Age
12WPY07_112	196.00	1.21	1.62800	0.01600	0.16020	0.00110	0.23260	980.7	6.2	958.0	6.0	1035	21	958.0	6.0	2.3	Single Age
12WPY07_113	55.88	1.53	16.53000	0.16000	0.52920	0.00480	0.81989	2907.4	9.1	2738.0	20.0	3024	13	3024.0	13.0	9.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY07_114	60.70	0.68	0.77900	0.02000	0.08450	0.00100	0.58832	581.0	10.0	522.9	6.0	818	50	DISC	DISC	10.0	Single Age
12WPY07_115	335.00	2.12	1.80300	0.01800	0.17150	0.00190	0.80408	1046.1	6.4	1020.0	10.0	1088	18	1020.0	10.0	2.5	Single Age
12WPY07_116	87.00	0.57	1.53800	0.01700	0.15680	0.00150	0.43294	946.5	6.9	938.6	8.3	956	22	938.6	8.3	0.8	Single Age
12WPY07_117	255.80	0.70	1.68000	0.01000	0.16530	0.00100	0.32957	1000.9	3.8	986.0	5.8	1032	16	986.0	5.8	1.5	Single Age
12WPY07_118	87.80	0.66	5.01200	0.06900	0.31790	0.00500	0.54414	1820.0	12.0	1782.0	24.0	1861	22	1861.0	22.0	4.2	Single Age
12WPY07_119	235.00	2.23	1.02900	0.05200	0.11510	0.00460	0.72554	716.0	26.0	702.0	26.0	796	86	702.0	26.0	2.0	Rim
12WPY07_119	150.10	1.32	2.19400	0.08700	0.17480	0.00510	0.89818	1175.0	28.0	1038.0	28.0	1456	35	DISC	DISC	11.7	Core
12WPY07_120	55.20	1.49	0.85500	0.01900	0.09850	0.00110	0.20057	630.0	10.0	605.3	6.7	695	43	605.3	6.7	3.9	Single Age
12WPY21_1	176.00	0.93	1.72100	0.02000	0.16880	0.00200	0.56435	1016.8	7.3	1005.0	11.0	1031	21	1005.0	11.0	1.2	Single Age
12WPY21_2	610.00	1.66	0.37470	0.00650	0.04754	0.00073	0.80839	323.5	4.7	299.4	4.5	480	22	299.4	4.5	7.4	Single Age
12WPY21_3	218.00	1.34	1.47400	0.03000	0.14840	0.00290	0.78291	918.0	12.0	892.0	16.0	960	27	892.0	16.0	2.8	Single Age
12WPY21_4	697.00	4.83	0.59720	0.00720	0.07560	0.00100	0.67528	475.3	4.6	469.8	6.1	500	25	469.8	6.1	1.2	Single Age
12WPY21_5	1075.00	0.95	0.39150	0.00800	0.04710	0.00110	0.86573	335.2	5.9	296.7	6.6	610	26	DISC	DISC	11.5	Single Age
12WPY21_6	283.00	0.62	0.38410	0.00590	0.05014	0.00067	0.53323	329.9	4.4	315.3	4.1	444	38	315.3	4.1	4.4	Single Age
12WPY21_7	415.00	14.04	0.89160	0.00990	0.10470	0.00100	0.40282	647.8	5.5	642.1	6.1	647	23	642.1	6.1	0.9	Single Age
12WPY21_8	400.00	66.00	0.45500	0.02800	0.06050	0.00380	0.81854	380.0	19.0	379.0	23.0	316	64	379.0	23.0	0.3	Rim
12WPY21_8	103.20	1.51	0.88200	0.01600	0.10430	0.00200	0.38517	641.6	8.8	640.0	12.0	659	46	640.0	12.0	0.2	Core
12WPY21_9	527.00	6.62	0.64200	0.01900	0.07910	0.00160	0.86245	502.0	11.0	490.5	9.5	535	37	490.5	9.5	2.3	Single Age
12WPY21_10	278.10	20.90	0.39700	0.01500	0.05130	0.00180	0.53771	339.0	11.0	322.0	11.0	480	68	322.0	11.0	5.0	Rim
12WPY21_10	143.50	0.40	12.02000	0.22000	0.47770	0.00880	0.84337	2608.0	16.0	2516.0	38.0	2662	17	2662.0	17.0	5.5	Core
12WPY21_11	290.00	4.61	0.66400	0.02500	0.08270	0.00290	0.81240	515.0	15.0	512.0	17.0	531	44	512.0	17.0	0.6	Single Age
12WPY21_12	1480.00	18.20	0.38450	0.00460	0.05168	0.00073	0.71085	330.2	3.4	324.8	4.5	377	22	324.8	4.5	1.6	Single Age
12WPY21_13	602.00	4.26	0.61100	0.00620	0.07654	0.00090	0.59014	484.1	3.9	475.4	5.4	529	22	475.4	5.4	1.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY21_14	206.00	1.46	4.37000	0.19000	0.28010	0.00930	0.91351	1702.0	35.0	1595.0	46.0	1799	30	1799.0	30.0	11.3	Single Age
12WPY21_15	569.00	4.75	0.37500	0.01000	0.05050	0.00160	0.74599	322.9	7.4	317.7	9.9	314	51	317.7	9.9	1.6	Single Age
12WPY21_16	138.20	2.19	0.70600	0.01200	0.08451	0.00096	0.58113	541.8	7.1	522.9	5.7	620	27	522.9	5.7	3.5	Single Age
12WPY21_17	1497.00	15.20	0.83400	0.03000	0.09660	0.00330	0.71486	615.0	16.0	594.0	19.0	670	62	594.0	19.0	3.4	Rim
12WPY21_17	108.20	1.26	1.55400	0.03500	0.14810	0.00330	0.64526	951.0	14.0	890.0	18.0	1097	35	890.0	18.0	6.4	Core
12WPY21_18	392.00	1.12	11.40000	0.28000	0.47450	0.00990	0.88198	2562.0	22.0	2500.0	43.0	2594	19	2594.0	19.0	3.6	Single Age
12WPY21_19	950.00	1.79	0.77350	0.00830	0.09355	0.00096	0.62601	581.6	4.7	576.5	5.6	602	19	576.5	5.6	0.9	Single Age
12WPY21_20	352.00	0.64	0.62900	0.01700	0.07160	0.00140	0.75751	496.0	10.0	445.5	8.4	726	33	DISC	DISC	10.2	Single Age
12WPY21_21	155.80	1.61	1.23000	0.01900	0.13020	0.00160	0.80326	815.3	9.0	788.9	9.4	889	23	788.9	9.4	3.2	Single Age
12WPY21_22	1820.00	8.02	0.40100	0.01300	0.05140	0.00150	0.64705	344.5	8.8	323.2	9.2	510	55	323.2	9.2	6.2	Rim
12WPY21_22	413.00	2.81	0.62100	0.01300	0.07530	0.00140	0.77475	489.8	8.0	467.9	8.1	565	29	467.9	8.1	4.5	Core
12WPY21_23	115.90	1.26	0.58300	0.01400	0.07570	0.00180	0.63767	468.1	9.3	470.0	11.0	475	45	470.0	11.0	0.4	Single Age
12WPY21_24	156.20	5.61	0.39000	0.01200	0.05074	0.00099	0.25827	334.4	8.8	319.0	6.1	426	73	319.0	6.1	4.6	Rim
12WPY21_24	200.90	2.82	0.66700	0.02100	0.08140	0.00240	0.85876	518.0	13.0	504.0	15.0	549	34	504.0	15.0	2.7	Core
12WPY21_25	93.70	0.65	1.46700	0.02100	0.14540	0.00190	0.19909	916.5	8.5	875.0	11.0	1010	38	875.0	11.0	4.5	Single Age
12WPY21_26	485.50	9.28	0.42800	0.01000	0.05650	0.00100	0.05907	361.2	7.3	354.1	6.3	407	51	354.1	6.3	2.0	Single Age
12WPY21_27	376.00	2.48	1.60400	0.01100	0.15770	0.00110	0.67686	971.6	4.3	944.2	6.2	1025	13	944.2	6.2	2.8	Single Age
12WPY21_28	48.80	0.73	0.73100	0.03200	0.08820	0.00160	0.24358	561.0	19.0	544.6	9.5	584	97	544.6	9.5	2.9	Single Age
12WPY21_29	348.00	1.46	0.73400	0.01100	0.09010	0.00140	0.51587	558.5	6.3	556.1	8.3	576	31	556.1	8.3	0.4	Single Age
12WPY21_30	560.00	140.00	0.38630	0.00580	0.05241	0.00050	0.27654	331.5	4.3	329.3	3.1	353	32	329.3	3.1	0.7	Single Age
12WPY21_31	361.00	6.88	0.61460	0.00820	0.07890	0.00100	0.64027	486.2	5.2	489.7	6.2	479	26	489.7	6.2	0.7	Single Age
12WPY21_32	118.50	0.54	0.97700	0.01700	0.11300	0.00130	0.59667	691.5	8.6	690.0	7.7	694	31	690.0	7.7	0.2	Single Age
12WPY21_33	95.00	1.35	0.66500	0.02300	0.08420	0.00170	0.58830	517.0	14.0	521.0	10.0	496	62	521.0	10.0	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY21_34	84.90	0.95	0.63300	0.01300	0.07811	0.00086	0.31501	497.4	8.2	484.8	5.1	548	45	484.8	5.1	2.5	Single Age
12WPY21_35	40.30	0.58	10.60000	0.29000	0.43700	0.01100	0.94130	2488.0	27.0	2333.0	51.0	2631	19	2631.0	19.0	11.3	Single Age
12WPY21_36	217.50	1.79	3.14000	0.12000	0.21950	0.00660	0.94228	1438.0	28.0	1278.0	35.0	1666	21	1666.0	21.0	23.3	Single Age
12WPY21_37	289.00	1.83	0.39500	0.01100	0.04750	0.00190	0.03693	337.9	8.3	299.0	12.0	610	100	DISC	DISC	11.5	Single Age
12WPY21_38	186.00	2.38	0.36430	0.00810	0.04969	0.00076	0.58853	315.1	6.0	312.6	4.7	345	40	312.6	4.7	0.8	Single Age
12WPY21_39	149.00	3.47	9.00000	0.18000	0.37450	0.00740	0.90662	2341.0	17.0	2050.0	35.0	2590	16	2590.0	16.0	20.8	Single Age
12WPY21_40	364.00	1.19	0.38870	0.00710	0.05334	0.00097	0.74571	334.0	5.4	335.0	5.9	310	37	335.0	5.9	0.3	Single Age
12WPY21_41	833.00	0.95	0.40510	0.00760	0.05033	0.00094	0.84637	345.0	5.5	316.5	5.8	550	25	316.5	5.8	8.3	Single Age
12WPY21_42	164.00	2.77	0.66100	0.01800	0.08320	0.00170	0.70755	514.0	11.0	515.0	10.0	530	39	515.0	10.0	0.2	Single Age
12WPY21_43	427.00	3.01	0.38530	0.00640	0.05215	0.00075	0.61940	330.7	4.7	327.7	4.6	354	29	327.7	4.6	0.9	Single Age
12WPY21_44	297.00	5.03	0.62590	0.00970	0.07890	0.00110	0.62529	494.6	5.9	489.4	6.5	513	28	489.4	6.5	1.1	Single Age
12WPY21_45	255.00	1.42	0.39800	0.01000	0.05030	0.00100	0.14834	340.8	7.0	316.3	6.3	499	61	316.3	6.3	7.2	Single Age
12WPY21_46	124.00	0.77	0.82100	0.01800	0.09850	0.00130	0.20542	607.4	9.9	605.3	7.5	628	36	605.3	7.5	0.3	Single Age
12WPY21_47	339.00	4.80	0.70800	0.02400	0.08520	0.00210	0.79933	542.0	14.0	527.0	12.0	591	32	527.0	12.0	2.8	Single Age
12WPY21_48	322.00	1.13	0.82700	0.02100	0.09570	0.00220	0.68643	612.0	11.0	589.0	13.0	696	37	589.0	13.0	3.8	Single Age
12WPY21_50	647.00	1.13	0.38700	0.00790	0.05270	0.00100	0.81275	331.8	5.8	332.2	6.1	339	33	332.2	6.1	0.1	Single Age
12WPY21_51	83.10	1.54	0.78400	0.01600	0.09510	0.00140	0.22904	587.1	9.2	585.7	8.4	598	50	585.7	8.4	0.2	Single Age
12WPY21_52	316.00	0.93	0.88100	0.01000	0.10400	0.00120	0.58930	641.5	5.4	637.6	7.2	665	20	637.6	7.2	0.6	Single Age
12WPY21_53	907.00	138.20	0.38050	0.00980	0.05010	0.00120	0.66499	327.3	7.2	315.1	7.2	419	49	315.1	7.2	3.7	Rim
12WPY21_53	607.00	38.70	3.52000	0.22000	0.21700	0.01100	0.95469	1533.0	50.0	1264.0	56.0	1908	35	DISC	DISC	33.8	Core
12WPY21_54	154.00	2.25	15.42000	0.39000	0.54600	0.01400	0.89002	2843.0	23.0	2807.0	58.0	2865	19	2865.0	19.0	2.0	Single Age
12WPY21_55	2250.00	1.75	0.36850	0.00850	0.04890	0.00110	0.95405	318.2	6.3	307.9	6.5	422	17	307.9	6.5	3.2	Single Age
12WPY21_56	219.00	2.70	0.51000	0.02200	0.06270	0.00150	0.77730	418.0	15.0	391.9	9.0	589	64	391.9	9.0	6.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY21_57	521.00	1.50	0.83400	0.01500	0.09960	0.00200	0.77646	617.2	8.1	612.0	11.0	630	25	612.0	11.0	0.8	Single Age
12WPY21_58	409.00	3.41	0.36240	0.00510	0.04954	0.00048	0.49291	313.8	3.8	311.7	3.0	334	32	311.7	3.0	0.7	Single Age
12WPY21_59	129.00	3.23	0.79500	0.01700	0.09500	0.00110	0.29753	593.3	9.8	584.9	6.3	635	48	584.9	6.3	1.4	Single Age
12WPY21_60	213.00	0.80	0.78200	0.01400	0.09390	0.00150	0.37784	586.3	7.9	578.5	8.9	614	37	578.5	8.9	1.3	Single Age
12WPY21_61	440.00	2.94	0.85200	0.02100	0.10210	0.00220	0.80154	628.0	11.0	626.0	13.0	631	33	626.0	13.0	0.3	Single Age
12WPY21_62	323.00	8.40	0.90900	0.05400	0.08540	0.00220	0.22024	654.0	28.0	528.0	13.0	1107	99	DISC	DISC	19.3	Single Age
12WPY21_63	695.00	1.05	1.23900	0.02700	0.13200	0.00230	0.89139	817.0	12.0	799.0	13.0	879	20	799.0	13.0	2.2	Single Age
12WPY21_64	101.10	1.45	8.72000	0.13000	0.37980	0.00580	0.90308	2307.0	14.0	2074.0	27.0	2526	12	2526.0	12.0	17.9	Single Age
12WPY21_65	146.60	1.71	0.82000	0.01200	0.09673	0.00095	0.16375	607.5	7.0	595.2	5.6	668	37	595.2	5.6	2.0	Single Age
12WPY21_66	125.80	0.88	0.79200	0.01400	0.09460	0.00150	0.48228	591.9	7.9	582.4	8.9	621	37	582.4	8.9	1.6	Single Age
12WPY21_67	2442.00	31.30	0.80900	0.02300	0.09480	0.00210	0.55849	602.0	13.0	584.0	13.0	678	53	584.0	13.0	3.0	Rim
12WPY21_67	370.00	1.34	10.79000	0.14000	0.43730	0.00720	0.75444	2505.0	12.0	2337.0	33.0	2637	18	2637.0	18.0	11.4	Core
12WPY21_68	19.90	0.40	0.59400	0.03900	0.06720	0.00280	0.34446	468.0	24.0	419.0	17.0	660	140	DISC	DISC	10.5	Single Age
12WPY21_69	615.00	1.69	0.38330	0.00630	0.05238	0.00079	0.74442	329.3	4.6	329.1	4.8	354	25	329.1	4.8	0.1	Single Age
12WPY21_70	270.00	1.26	0.83400	0.01100	0.09970	0.00120	0.66017	615.6	6.0	612.7	7.1	637	22	612.7	7.1	0.5	Single Age
12WPY21_71	910.00	10.08	0.37300	0.00330	0.05108	0.00046	0.46192	321.8	2.4	321.1	2.8	332	22	321.1	2.8	0.2	Single Age
12WPY21_72	575.00	13.90	0.41830	0.00560	0.05626	0.00047	0.44612	354.6	4.0	352.8	2.9	389	26	352.8	2.9	0.5	Single Age
12WPY21_73	222.00	1.78	0.89900	0.02400	0.10740	0.00290	0.88063	652.0	13.0	657.0	17.0	609	28	657.0	17.0	0.8	Single Age
12WPY21_74	194.00	0.60	0.81700	0.01500	0.09850	0.00170	0.84625	605.6	8.5	605.7	9.8	609	25	605.7	9.8	0.0	Single Age
12WPY21_75	100.70	1.42	0.90200	0.02100	0.10610	0.00180	0.69326	651.0	11.0	650.0	11.0	662	35	650.0	11.0	0.2	Single Age
12WPY21_76	32.50	1.28	3.53000	0.15000	0.22920	0.00690	0.78694	1529.0	33.0	1329.0	36.0	1805	41	1805.0	41.0	26.4	Single Age
12WPY21_77	71.10	1.50	16.78000	0.62000	0.56600	0.02000	0.90197	2920.0	36.0	2891.0	82.0	2954	37	2954.0	37.0	2.1	Single Age
12WPY21_78	154.00	1.28	1.63500	0.03600	0.15980	0.00180	0.43695	982.0	14.0	955.5	9.9	1046	41	955.5	9.9	2.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY21_79	36.90	0.83	0.76900	0.02000	0.08950	0.00160	0.04036	582.0	12.0	552.6	9.5	685	71	552.6	9.5	5.1	Single Age
12WPY21_80	25.51	0.63	1.19200	0.03000	0.12420	0.00270	0.27544	799.0	14.0	754.0	15.0	931	60	754.0	15.0	5.6	Single Age
12WPY21_81	296.00	8.96	0.55700	0.01100	0.07180	0.00130	0.76278	449.8	7.3	446.7	7.6	491	27	446.7	7.6	0.7	Single Age
12WPY21_82	115.60	1.48	0.84900	0.01500	0.10130	0.00120	0.33239	623.6	8.3	621.7	7.2	643	35	621.7	7.2	0.3	Single Age
12WPY21_83	246.00	1.61	0.43960	0.00900	0.05836	0.00074	0.06410	369.6	6.3	365.6	4.5	399	51	365.6	4.5	1.1	Single Age
12WPY21_84	554.00	1.28	0.52060	0.00900	0.06509	0.00091	0.64479	425.2	6.0	406.4	5.5	516	31	406.4	5.5	4.4	Single Age
12WPY21_85	441.00	6.30	13.16000	0.26000	0.48000	0.00820	0.96538	2688.0	19.0	2525.0	36.0	2813	10	2813.4	9.7	10.3	Single Age
12WPY21_86	655.00	0.86	0.39780	0.00430	0.05282	0.00070	0.38918	340.3	3.2	332.3	4.4	419	30	332.3	4.4	2.4	Single Age
12WPY21_87	70.50	0.91	3.58000	0.11000	0.24110	0.00690	0.76990	1547.0	24.0	1391.0	36.0	1763	37	1763.0	37.0	21.1	Single Age
12WPY21_88	395.00	4.21	0.72800	0.01500	0.08760	0.00160	0.75649	554.9	9.0	541.1	9.2	615	26	541.1	9.2	2.5	Single Age
12WPY21_89	56.00	0.65	0.58800	0.02400	0.06250	0.00220	0.58603	468.0	15.0	391.0	13.0	878	78	DISC	DISC	16.5	Single Age
12WPY21_90	247.00	4.29	0.57630	0.00860	0.07389	0.00070	0.47629	461.8	5.5	459.5	4.2	486	31	459.5	4.2	0.5	Single Age
12WPY21_91	329.10	4.63	0.64200	0.01100	0.08000	0.00110	0.83347	503.3	6.6	496.3	6.8	536	24	496.3	6.8	1.4	Single Age
12WPY21_92	347.00	4.66	1.08900	0.03000	0.12200	0.00270	0.93273	746.0	15.0	742.0	15.0	781	24	742.0	15.0	0.5	Single Age
12WPY21_93	416.00	0.58	0.82410	0.00960	0.09650	0.00100	0.50137	610.7	5.4	594.1	5.9	654	24	594.1	5.9	2.7	Single Age
12WPY21_94	716.00	3.48	0.87900	0.01600	0.10080	0.00170	0.86762	639.5	8.6	619.0	10.0	720	17	619.0	10.0	3.2	Single Age
12WPY21_95	231.00	0.56	0.43800	0.01200	0.05221	0.00083	0.49499	368.3	8.5	328.0	5.1	632	55	DISC	DISC	10.9	Single Age
12WPY21_96	191.10	1.77	0.56880	0.00650	0.07305	0.00079	0.41912	457.1	4.2	454.5	4.8	481	30	454.5	4.8	0.6	Single Age
12WPY21_97	649.00	1.44	0.44470	0.00570	0.05541	0.00078	0.70394	373.4	4.0	347.6	4.8	556	23	347.6	4.8	6.9	Single Age
12WPY21_98	613.00	7.55	0.68400	0.01700	0.08370	0.00170	0.92161	530.0	10.0	517.7	9.8	574	23	517.7	9.8	2.3	Single Age
12WPY21_99	219.00	1.90	0.65100	0.02200	0.08140	0.00240	0.90518	509.0	14.0	504.0	14.0	545	32	504.0	14.0	1.0	Single Age
12WPY21_100	218.00	1.45	4.43000	0.14000	0.27840	0.00730	0.89476	1714.0	26.0	1582.0	37.0	1881	24	1881.0	24.0	15.9	Single Age
12WPY21_101	986.00	2.79	0.66200	0.02900	0.07950	0.00300	0.96746	513.0	18.0	495.0	19.0	582	24	495.0	19.0	3.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY21_102	1640.00	2.88	0.37030	0.00640	0.04520	0.00100	0.69576	319.6	4.7	285.0	6.2	561	32	DISC	DISC	10.8	Single Age
12WPY21_103	125.70	2.09	12.62000	0.15000	0.50580	0.00610	0.77123	2651.0	11.0	2638.0	26.0	2663	12	2663.0	12.0	0.9	Single Age
12WPY21_106	214.00	6.86	0.75100	0.01400	0.08700	0.00150	0.42183	568.7	8.3	537.5	9.1	673	39	537.5	9.1	5.5	Rim
12WPY21_106	298.00	3.53	0.93200	0.02900	0.11000	0.00340	0.81857	667.0	15.0	672.0	20.0	665	33	672.0	20.0	0.7	Core
12WPY21_107	220.00	1.52	0.59410	0.00900	0.07600	0.00100	0.52640	475.3	5.9	472.6	6.0	482	29	472.6	6.0	0.6	Single Age
12WPY21_108	891.00	2.17	0.40420	0.00440	0.05462	0.00046	0.61240	344.6	3.2	342.8	2.8	367	20	342.8	2.8	0.5	Single Age
12WPY21_109	271.00	31.60	0.43590	0.00860	0.05830	0.00110	0.29184	367.2	6.1	365.3	6.7	406	58	365.3	6.7	0.5	Rim
12WPY21_109	255.00	6.81	0.62400	0.01100	0.07750	0.00120	0.67850	492.0	6.6	481.2	7.2	545	27	481.2	7.2	2.2	Core
12WPY21_110	522.00	14.70	0.43700	0.01000	0.05790	0.00120	0.65591	368.0	7.4	363.0	7.3	382	36	363.0	7.3	1.4	Rim
12WPY21_110	147.80	1.56	0.70100	0.01400	0.08720	0.00140	0.48444	541.1	8.7	538.8	8.4	552	39	538.8	8.4	0.4	Core
12WPY21_111	77.40	0.31	10.26000	0.15000	0.44120	0.00750	0.89469	2458.0	14.0	2355.0	34.0	2534	15	2534.0	15.0	7.1	Single Age
12WPY21_112	46.30	0.58	13.21000	0.17000	0.49640	0.00710	0.72546	2694.0	12.0	2597.0	31.0	2766	16	2766.0	16.0	6.1	Single Age
12WPY21_113	236.00	1.16	7.96100	0.08500	0.35130	0.00390	0.85640	2225.9	9.6	1941.0	19.0	2503	10	2503.0	10.0	22.5	Single Age
12WPY21_114	170.00	0.71	0.41140	0.00800	0.05491	0.00095	0.41387	349.6	5.8	344.6	5.8	396	40	344.6	5.8	1.4	Single Age
12WPY21_115	261.00	0.62	9.97000	0.13000	0.42160	0.00640	0.87059	2431.0	12.0	2270.0	30.0	2568	13	2568.0	13.0	11.6	Single Age
12WPY21_116	101.10	2.44	8.17000	0.12000	0.33520	0.00350	0.64239	2253.0	13.0	1866.0	17.0	2621	17	2621.0	17.0	28.8	Single Age
12WPY21_117	780.00	1.87	11.41000	0.40000	0.45400	0.01500	0.97871	2550.0	35.0	2410.0	68.0	2666	13	2666.0	13.0	9.6	Single Age
12WPY21_118	420.00	10.00	0.61900	0.01400	0.07960	0.00190	0.66159	489.6	8.5	493.0	12.0	488	27	493.0	12.0	0.7	Single Age
12WPY21_119	243.00	0.81	1.58600	0.02600	0.16190	0.00260	0.83090	966.4	9.7	967.0	14.0	964	19	967.0	14.0	0.1	Single Age
12WPY21_120	709.00	3.68	1.61000	0.01800	0.16180	0.00200	0.79395	974.3	6.8	967.0	11.0	996	18	967.0	11.0	0.7	Single Age
12WPY21_121	77.70	1.13	18.54000	0.33000	0.57600	0.01000	0.91116	3017.0	17.0	2930.0	41.0	3071	14	3071.0	14.0	4.6	Single Age
12WPY21_122	260.00	1.88	0.59400	0.01100	0.07560	0.00110	0.71037	474.1	6.6	469.5	6.8	472	29	469.5	6.8	1.0	Single Age
12WPY21_123	229.70	7.53	0.59450	0.00780	0.07621	0.00084	0.49144	473.5	4.9	473.4	5.0	482	28	473.4	5.0	0.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY21_124	178.00	1.43	0.80400	0.01400	0.09610	0.00120	0.23387	598.4	7.9	591.6	7.2	619	38	591.6	7.2	1.1	Single Age
12WPY23_1	313.00	0.62	0.80900	0.01000	0.09205	0.00083	0.25173	601.5	5.6	567.6	4.9	733	29	567.6	4.9	5.6	Single Age
12WPY23_2	178.60	0.85	1.59600	0.02300	0.15590	0.00190	0.90662	968.1	9.0	934.0	11.0	1043	8	934.0	11.0	3.5	Single Age
12WPY23_3	406.00	2.99	0.57120	0.00780	0.06891	0.00095	0.49826	459.4	4.9	429.5	5.7	598	18	429.5	5.7	6.5	Single Age
12WPY23_4	318.00	1.41	0.88110	0.00870	0.10390	0.00110	0.83303	641.4	4.7	637.2	6.5	658	7	637.2	6.5	0.7	Single Age
12WPY23_5	415.00	22.80	0.41280	0.00670	0.05277	0.00069	0.36826	350.8	4.8	331.5	4.2	501	33	331.5	4.2	5.5	Single Age
12WPY23_6	842.00	2.14	0.37660	0.00530	0.04661	0.00081	0.86013	324.5	3.9	293.6	5.0	567	13	293.6	5.0	9.5	Single Age
12WPY23_7	1580.00	134.00	0.40510	0.00860	0.05370	0.00086	0.77762	345.2	6.2	337.2	5.2	408	23	337.2	5.2	2.3	Rim
12WPY23_7	62.69	1.23	4.75800	0.08700	0.30130	0.00560	0.90086	1777.0	15.0	1698.0	28.0	1879	8	1878.7	7.6	9.6	Core
12WPY23_8	703.00	2.02	0.72320	0.00580	0.08876	0.00062	0.81882	552.4	3.4	548.2	3.6	577	5	548.2	3.6	0.8	Single Age
12WPY23_9	333.00	1.70	0.38170	0.00350	0.05139	0.00035	0.54718	328.3	2.5	323.1	2.2	359	11	323.1	2.2	1.6	Single Age
12WPY23_10	139.90	1.47	0.78130	0.00960	0.09480	0.00150	0.53444	586.1	5.5	583.7	9.0	591	21	583.7	9.0	0.4	Single Age
12WPY23_11	33.50	1.12	1.40600	0.02400	0.14420	0.00170	0.17090	890.8	9.9	868.3	9.4	955	16	868.3	9.4	2.5	Single Age
12WPY23_12	334.00	4.70	0.69800	0.01300	0.08570	0.00140	0.91428	537.8	7.9	529.9	8.3	573	10	529.9	8.3	1.5	Single Age
12WPY23_13	393.00	1.81	0.61870	0.00610	0.07843	0.00080	0.75418	489.4	3.8	486.7	4.8	516	10	486.7	4.8	0.6	Single Age
12WPY23_14	289.00	2.10	0.94200	0.01800	0.10980	0.00130	0.84087	675.0	9.5	673.1	8.0	690	16	673.1	8.0	0.3	Single Age
12WPY23_15	543.00	2.83	0.39140	0.00300	0.05309	0.00043	0.64350	335.4	2.2	333.5	2.6	367	10	333.5	2.6	0.6	Single Age
12WPY23_16	461.00	5.78	0.42070	0.00370	0.05245	0.00060	0.39993	356.5	2.6	329.5	3.7	547	22	329.5	3.7	7.6	Single Age
12WPY23_17	566.00	2.24	0.73440	0.00660	0.08688	0.00076	0.72467	559.0	3.8	537.0	4.5	635	11	537.0	4.5	3.9	Single Age
12WPY23_18	562.00	105.00	0.40770	0.00470	0.05483	0.00067	0.72171	347.1	3.4	344.1	4.1	370	14	344.1	4.1	0.9	Single Age
12WPY23_19	42.60	0.73	0.80300	0.01200	0.09570	0.00120	0.15931	598.1	6.9	588.9	7.0	643	22	588.9	7.0	1.5	Single Age
12WPY23_20	424.00	20.50	0.44800	0.01400	0.05980	0.00170	0.85466	375.4	9.8	375.0	10.0	402	33	375.0	10.0	0.1	Rim
12WPY23_20	83.22	1.25	0.94800	0.01200	0.11370	0.00140	0.22762	676.8	6.4	693.9	7.9	624	21	693.9	7.9	2.5	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY23_21	42.60	2.14	0.93200	0.01900	0.09620	0.00110	0.05993	668.0	10.0	592.3	6.7	965	41	DISC	DISC	11.3	Single Age
12WPY23_22	1014.00	53.20	0.40870	0.00690	0.05560	0.00100	0.83900	348.9	5.3	349.1	6.3	371	14	349.1	6.3	0.1	Single Age
12WPY23_23	416.00	9.50	0.63290	0.00520	0.08025	0.00057	0.61566	497.8	3.3	497.6	3.4	500	8	497.6	3.4	0.0	Single Age
12WPY23_24	176.00	1.16	8.65000	0.19000	0.38910	0.00760	0.95659	2299.0	20.0	2117.0	36.0	2468	6	2467.5	6.4	14.2	Single Age
12WPY23_25	372.00	0.57	0.82000	0.01500	0.09680	0.00140	0.76798	607.6	8.6	595.8	8.3	672	16	595.8	8.3	1.9	Single Age
12WPY23_26	68.40	0.97	5.12600	0.06300	0.31810	0.00400	0.77467	1840.0	10.0	1780.0	20.0	1909	7	1908.6	6.9	6.7	Single Age
12WPY23_27	455.00	2.13	0.40450	0.00540	0.04998	0.00044	0.39340	344.8	3.9	314.4	2.7	567	18	314.4	2.7	8.8	Single Age
12WPY23_28	177.00	3.72	0.66200	0.00650	0.08330	0.00063	0.32489	516.7	4.0	515.7	3.8	516	15	515.7	3.8	0.2	Single Age
12WPY23_29	508.00	1.20	0.38140	0.00510	0.05146	0.00049	0.74667	328.0	3.7	323.5	3.0	381	16	323.5	3.0	1.4	Single Age
12WPY23_30	582.00	0.50	0.40450	0.00360	0.05445	0.00033	0.14962	344.9	2.6	341.8	2.0	366	12	341.8	2.0	0.9	Single Age
12WPY23_31	242.00	1.18	0.54570	0.00750	0.06933	0.00099	0.77760	442.0	4.9	432.1	5.9	491	11	432.1	5.9	2.2	Single Age
12WPY23_32	128.00	1.01	0.66700	0.02100	0.07840	0.00210	0.82999	518.0	13.0	487.0	12.0	686	27	487.0	12.0	6.0	Single Age
12WPY23_33	810.00	1.90	0.38180	0.00700	0.05160	0.00100	0.93994	328.1	5.2	324.1	6.2	374	11	324.1	6.2	1.2	Single Age
12WPY23_34	231.00	4.29	0.79800	0.00740	0.09576	0.00068	0.51140	595.6	4.2	589.5	4.0	622	12	589.5	4.0	1.0	Single Age
12WPY23_35	125.50	1.69	0.75200	0.00990	0.09290	0.00093	0.50431	569.1	5.8	572.6	5.5	546	13	572.6	5.5	0.6	Single Age
12WPY23_36	416.00	10.93	0.83770	0.00960	0.10010	0.00110	0.89871	617.6	5.3	615.1	6.6	623	6	615.1	6.6	0.4	Single Age
12WPY23_37	180.00	7.93	0.55610	0.00540	0.07181	0.00052	0.33554	448.9	3.5	447.0	3.1	472	13	447.0	3.1	0.4	Single Age
12WPY23_38	604.00	28.20	0.97200	0.03000	0.11220	0.00230	0.87016	688.0	15.0	686.0	13.0	683	19	686.0	13.0	0.3	Rim
12WPY23_38	273.00	1.12	1.42400	0.01800	0.14820	0.00160	0.52252	899.0	7.3	891.0	8.8	911	12	891.0	8.8	0.9	Core
12WPY23_39	543.00	146.00	0.86180	0.00430	0.10223	0.00048	0.36688	631.0	2.3	627.4	2.8	641	6	627.4	2.8	0.6	Single Age
12WPY23_40	285.00	8.16	0.59300	0.01000	0.07674	0.00082	0.54739	472.8	6.5	476.6	4.9	461	24	476.6	4.9	0.8	Rim
12WPY23_40	27.68	0.84	5.43000	0.09000	0.33660	0.00490	0.48967	1889.0	14.0	1870.0	24.0	1916	14	1916.0	14.0	2.4	Core
12WPY23_41	198.00	2.06	0.67000	0.01400	0.08350	0.00160	0.78166	522.0	8.8	518.2	9.1	559	18	518.2	9.1	0.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY23_42	257.10	0.99	0.39590	0.00400	0.05321	0.00036	0.24864	338.6	2.9	334.2	2.2	371	16	334.2	2.2	1.3	Single Age
12WPY23_43	394.00	1.26	0.76050	0.00710	0.09129	0.00091	0.67820	574.1	4.1	563.1	5.4	617	12	563.1	5.4	1.9	Single Age
12WPY23_44	131.00	14.50	0.43810	0.00570	0.04800	0.00130	0.29196	368.8	4.0	301.9	8.2	835	69	DISC	DISC	18.1	Single Age
12WPY23_45	482.00	11.10	0.59600	0.03200	0.07600	0.00300	0.95333	476.0	21.0	472.0	18.0	512	27	472.0	18.0	0.8	Single Age
12WPY23_46	71.20	3.37	0.60910	0.00880	0.07649	0.00089	0.23939	484.2	5.5	475.1	5.3	520	20	475.1	5.3	1.9	Single Age
12WPY23_47	680.00	3.80	0.34940	0.00880	0.04310	0.00100	0.86731	304.6	6.5	272.2	6.4	606	26	DISC	DISC	10.6	Single Age
12WPY23_48	143.50	8.10	1.01900	0.01800	0.11480	0.00150	0.75869	714.1	9.3	701.7	9.0	756	16	701.7	9.0	1.7	Single Age
12WPY23_49	69.70	1.12	0.94900	0.01200	0.10990	0.00140	0.32802	677.5	6.4	672.2	7.8	690	16	672.2	7.8	0.8	Single Age
12WPY23_50	75.60	0.87	2.98400	0.07000	0.20000	0.00440	0.91392	1404.0	18.0	1175.0	24.0	1762	12	DISC	DISC	16.3	Single Age
12WPY23_51	239.00	1.02	0.58420	0.00620	0.07366	0.00063	0.43615	467.0	4.0	458.2	3.8	496	16	458.2	3.8	1.9	Single Age
12WPY23_52	90.10	1.95	0.38070	0.00640	0.05229	0.00077	0.32619	328.0	4.6	328.5	4.7	303	24	328.5	4.7	0.2	Single Age
12WPY23_53	233.00	5.24	0.36970	0.00400	0.05048	0.00046	0.32537	319.7	2.9	317.5	2.8	350	12	317.5	2.8	0.7	Single Age
12WPY23_54	111.30	1.24	0.41580	0.00550	0.05556	0.00039	0.02776	353.4	4.0	348.6	2.4	387	16	348.6	2.4	1.4	Single Age
12WPY23_55	214.00	0.54	0.88200	0.00940	0.10480	0.00100	0.74378	641.8	5.1	642.3	5.9	642	10	642.3	5.9	0.1	Single Age
12WPY23_56	950.00	5.81	0.41240	0.00430	0.04963	0.00051	0.42691	350.5	3.1	312.3	3.1	601	17	DISC	DISC	10.9	Single Age
12WPY23_58	271.00	4.18	0.39980	0.00510	0.05451	0.00052	0.55108	341.4	3.7	342.2	3.2	345	13	342.2	3.2	0.2	Single Age
12WPY23_59	603.00	1.76	0.93450	0.00700	0.10524	0.00064	0.62504	669.9	3.7	645.0	3.8	747	8	645.0	3.8	3.7	Single Age
12WPY23_60	112.80	1.78	10.37200	0.08500	0.43680	0.00370	0.84569	2468.1	7.6	2338.0	17.0	2577	5	2577.0	4.9	9.3	Single Age
12WPY23_61	233.00	1.93	0.41240	0.00520	0.05680	0.00047	0.47005	350.5	3.8	356.1	2.9	311	17	356.1	2.9	1.6	Single Age
12WPY23_62	1217.00	3.88	0.39540	0.00460	0.05261	0.00067	0.86404	338.2	3.3	330.5	4.1	387	6	330.5	4.1	2.3	Single Age
12WPY23_63	301.00	0.85	0.39450	0.00480	0.05350	0.00062	0.55734	338.0	3.5	335.9	3.8	352	16	335.9	3.8	0.6	Single Age
12WPY23_64	572.00	12.60	0.53850	0.00840	0.06586	0.00088	0.83084	437.2	5.5	411.1	5.3	572	10	411.1	5.3	6.0	Single Age
12WPY23_65	553.00	2.36	5.59100	0.05700	0.33560	0.00370	0.86238	1914.0	8.9	1865.0	18.0	1961	8	1960.7	8.0	4.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY23_66	198.00	2.23	0.63700	0.01400	0.07588	0.00072	0.69658	499.9	8.8	471.5	4.3	616	30	471.5	4.3	5.7	Single Age
12WPY23_67	355.00	1.24	0.63420	0.00500	0.08128	0.00059	0.40777	498.6	3.1	503.7	3.5	477	12	503.7	3.5	1.0	Single Age
12WPY23_68	534.00	1.13	0.38560	0.00510	0.05173	0.00041	0.16006	331.0	3.7	325.1	2.5	378	20	325.1	2.5	1.8	Single Age
12WPY23_69	179.00	0.95	0.86500	0.00730	0.10210	0.00110	0.11794	632.7	4.0	626.5	6.3	661	12	626.5	6.3	1.0	Single Age
12WPY23_71	238.00	2.17	0.58580	0.00690	0.07461	0.00079	0.46724	468.1	4.4	463.8	4.7	495	16	463.8	4.7	0.9	Single Age
12WPY23_72	546.00	2.16	0.71650	0.00470	0.08834	0.00056	0.63021	548.5	2.8	545.7	3.3	566	6	545.7	3.3	0.5	Single Age
12WPY23_73	19.00	0.81	1.58600	0.02900	0.16030	0.00250	0.17224	964.0	11.0	958.0	14.0	1007	30	958.0	14.0	0.6	Single Age
12WPY23_74	232.00	2.72	3.44800	0.07800	0.16280	0.00310	0.83770	1514.0	18.0	972.0	17.0	2392	13	DISC	DISC	35.8	Single Age
12WPY23_75	152.80	1.63	11.10000	0.17000	0.43670	0.00880	0.75523	2530.0	14.0	2334.0	40.0	2714	11	2714.0	11.0	14.0	Single Age
12WPY23_76	127.50	1.65	0.59920	0.00830	0.07597	0.00083	0.27709	477.2	5.2	472.0	5.0	502	19	472.0	5.0	1.1	Single Age
12WPY23_77	529.00	1.79	0.52800	0.02100	0.05223	0.00030	0.60834	429.0	14.0	328.2	1.8	986	72	DISC	DISC	23.5	Single Age
12WPY23_78	192.80	2.94	0.74170	0.00710	0.08954	0.00067	0.48514	563.3	4.1	552.8	4.0	601	12	552.8	4.0	1.9	Single Age
12WPY23_79	111.00	1.16	0.99900	0.01300	0.11410	0.00160	0.62047	704.2	6.9	696.2	9.0	742	16	696.2	9.0	1.1	Single Age
12WPY23_80	185.50	1.07	0.59390	0.00790	0.07515	0.00074	0.44640	473.2	5.0	467.1	4.4	512	20	467.1	4.4	1.3	Single Age
12WPY23_81	480.00	1.12	0.37770	0.00340	0.05138	0.00048	0.55398	325.3	2.5	323.0	2.9	351	13	323.0	2.9	0.7	Single Age
12WPY23_82	376.60	6.35	0.61690	0.00660	0.07735	0.00075	0.73065	487.7	4.1	480.2	4.5	523	8	480.2	4.5	1.5	Single Age
12WPY23_83	105.00	2.44	0.53600	0.01000	0.06745	0.00087	0.14175	435.8	6.8	420.8	5.3	533	23	420.8	5.3	3.4	Single Age
12WPY23_84	295.00	0.83	0.40170	0.00450	0.05484	0.00052	0.59099	342.8	3.2	344.2	3.2	338	12	344.2	3.2	0.4	Single Age
12WPY23_85	48.80	2.00	2.58500	0.07500	0.15600	0.00570	0.77958	1295.0	21.0	934.0	32.0	1960	22	DISC	DISC	27.9	Single Age
12WPY23_86	140.00	1.11	0.81200	0.01400	0.09631	0.00094	0.09328	603.4	7.7	592.7	5.5	653	19	592.7	5.5	1.8	Single Age
12WPY23_87	123.00	1.14	0.41120	0.00910	0.05558	0.00086	0.60932	350.3	6.7	348.7	5.3	363	25	348.7	5.3	0.5	Single Age
12WPY23_88	727.00	1.01	0.34060	0.00400	0.04493	0.00056	0.70419	297.5	3.0	283.3	3.5	409	16	283.3	3.5	4.8	Single Age
12WPY23_89	369.00	41.30	0.45590	0.00980	0.05421	0.00099	0.71790	381.1	6.8	340.3	6.1	642	24	DISC	DISC	10.7	Single Age

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12WPY23_90	213.10	4.96	0.89270	0.00990	0.10670	0.00110	0.63152	647.6	5.3	653.3	6.1	616	13	653.3	6.1	0.9	Single Age
12WPY23_91	477.00	0.69	0.36580	0.00370	0.04956	0.00050	0.67067	316.5	2.8	311.8	3.1	350	12	311.8	3.1	1.5	Single Age
12WPY23_92	496.00	4.72	0.37690	0.00500	0.05099	0.00074	0.83365	324.7	3.7	320.6	4.5	367	11	320.6	4.5	1.3	Single Age
12WPY23_93	678.00	3.16	0.39730	0.00600	0.05220	0.00096	0.50813	339.6	4.4	328.0	5.9	423	27	328.0	5.9	3.4	Single Age
12WPY23_94	125.00	1.35	5.07100	0.04500	0.31390	0.00290	0.73952	1830.8	7.5	1760.0	14.0	1913	7	1912.6	7.4	8.0	Single Age
12WPY23_95	298.00	3.61	0.57960	0.00450	0.07432	0.00063	0.54599	464.1	2.9	462.1	3.8	468	12	462.1	3.8	0.4	Single Age
12WPY23_96	277.00	1.11	0.40910	0.00880	0.05381	0.00093	0.73432	347.8	6.4	337.8	5.7	428	19	337.8	5.7	2.9	Single Age
12WPY23_97	158.00	0.49	0.83000	0.01200	0.09970	0.00110	0.61437	613.5	6.4	612.8	6.7	618	15	612.8	6.7	0.1	Single Age
12WPY23_98	290.00	0.65	0.46680	0.00620	0.05744	0.00092	0.60399	388.9	4.3	360.0	5.6	563	23	360.0	5.6	7.4	Single Age
12WPY23_99	745.00	9.20	0.38490	0.00740	0.05124	0.00085	0.56569	330.6	5.4	322.1	5.2	413	23	322.1	5.2	2.6	Rim
12WPY23_99	115.40	0.64	0.82800	0.02300	0.09210	0.00210	0.56349	612.0	13.0	568.0	13.0	757	24	568.0	13.0	7.2	Core
12WPY23_100	635.00	1.14	0.72130	0.00990	0.08810	0.00110	0.85478	551.2	5.8	544.2	6.7	587	7	544.2	6.7	1.3	Single Age
12WPY23_101	326.00	1.22	0.39430	0.00370	0.05387	0.00045	0.48890	337.8	2.6	338.2	2.8	354	12	338.2	2.8	0.1	Single Age
12WPY23_102	440.00	7.38	0.45700	0.00530	0.05999	0.00067	0.68961	382.6	3.5	375.5	4.1	435	12	375.5	4.1	1.9	Single Age
12WPY23_103	609.00	3.10	0.41770	0.00460	0.05525	0.00042	0.70861	354.3	3.3	346.7	2.6	410	11	346.7	2.6	2.1	Single Age
12WPY23_104	80.80	1.07	1.08700	0.01000	0.12163	0.00088	0.16803	748.1	4.9	739.9	5.0	777	14	739.9	5.0	1.1	Single Age
12WPY23_105	775.00	4.54	0.40230	0.00330	0.05460	0.00038	0.50798	343.3	2.4	342.7	2.3	357	13	342.7	2.3	0.2	Single Age
12WPY23_106	910.00	4.41	0.34960	0.00650	0.04563	0.00079	0.90146	304.2	4.8	287.6	4.9	428	12	287.6	4.9	5.5	Single Age
12WPY23_107	112.60	3.18	0.54500	0.00760	0.07153	0.00090	0.37702	441.5	5.0	445.4	5.4	452	20	445.4	5.4	0.9	Single Age
12WPY23_108	389.00	5.57	1.17700	0.07200	0.10480	0.00370	0.92937	787.0	33.0	642.0	22.0	1224	52	DISC	DISC	18.4	Single Age
12WPY23_109	382.00	1.09	0.78290	0.00620	0.09389	0.00085	0.63850	587.0	3.6	578.4	5.0	623	10	578.4	5.0	1.5	Single Age
12WPY23_110	304.00	4.36	0.64440	0.00880	0.07937	0.00090	0.76948	504.8	5.4	492.3	5.4	555	11	492.3	5.4	2.5	Single Age
12WPY23_111	1440.00	1.70	0.27440	0.00720	0.03410	0.00100	0.94170	245.9	5.8	216.2	6.3	548	17	DISC	DISC	12.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY23_112	112.10	1.73	0.62250	0.00800	0.07828	0.00085	0.24291	491.2	5.0	485.8	5.1	526	20	485.8	5.1	1.1	Single Age
12WPY23_113	9.35	0.36	0.58200	0.03800	0.06060	0.00160	0.25139	462.0	24.0	379.1	9.6	990	110	DISC	DISC	17.9	Single Age
12WPY23_114	20.85	1.71	7.68000	0.14000	0.15210	0.00260	0.64869	2193.0	17.0	913.0	15.0	3784	9	DISC	DISC	58.4	Single Age
12WPY23_115	815.00	2.79	0.38990	0.00300	0.05303	0.00043	0.72659	334.3	2.2	333.1	2.6	352	8	333.1	2.6	0.4	Single Age
12WPY23_116	720.00	3.90	0.78020	0.00440	0.09461	0.00056	0.61740	585.5	2.5	582.7	3.3	602	7	582.7	3.3	0.5	Single Age
12WPY23_117	161.20	4.24	0.57560	0.00750	0.07434	0.00057	0.66619	461.5	4.8	462.2	3.4	475	13	462.2	3.4	0.2	Single Age
12WPY23_118	688.00	3.18	1.38300	0.01900	0.13310	0.00160	0.75468	881.3	7.9	805.6	8.8	1095	10	805.6	8.8	8.6	Single Age
12WPY23_119	609.00	90.00	0.39600	0.01700	0.05400	0.00270	0.85785	338.0	12.0	343.0	15.0	362	25	343.0	15.0	1.5	Rim
12WPY23_119	91.80	0.76	0.78300	0.01200	0.09290	0.00120	0.42727	588.1	6.7	572.5	7.1	643	17	572.5	7.1	2.7	Core
12WPY23_120	263.00	4.41	0.80460	0.00600	0.09388	0.00053	0.13070	599.4	3.4	578.4	3.1	680	10	578.4	3.1	3.5	Single Age
12WPY23_121	718.00	1.50	0.35500	0.01300	0.04650	0.00170	0.93739	308.1	9.4	293.0	11.0	433	15	293.0	11.0	4.9	Single Age
12WPY23_122	548.00	10.20	0.93500	0.02500	0.10980	0.00270	0.94271	670.0	13.0	671.0	15.0	678	11	671.0	15.0	0.1	Rim
12WPY23_122	192.10	4.43	1.51400	0.02000	0.15990	0.00210	0.65054	935.8	8.2	956.0	11.0	893	15	956.0	11.0	2.2	Core
12WPY23_123	284.00	2.99	0.37950	0.00390	0.05170	0.00036	0.27137	326.6	2.9	324.9	2.2	349	15	324.9	2.2	0.5	Single Age
12WPY23_124	301.00	13.60	0.62810	0.00680	0.07989	0.00072	0.62745	494.8	4.2	495.4	4.3	496	13	495.4	4.3	0.1	Single Age
12WPY23_125	275.00	8.90	0.57970	0.00850	0.07366	0.00091	0.43530	464.2	5.5	458.2	5.5	517	19	458.2	5.5	1.3	Rim
12WPY23_125	294.00	1.14	0.79630	0.00940	0.09656	0.00092	0.35968	594.6	5.3	594.2	5.4	597	14	594.2	5.4	0.1	Core
12WPY24_1	58.50	1.00	1.78400	0.03100	0.17320	0.00320	0.52622	1040.0	12.0	1031.0	17.0	1091	20	1031.0	17.0	0.9	Single Age
12WPY24_2	66.50	2.61	0.74000	0.02300	0.08520	0.00210	0.39413	561.0	14.0	529.0	12.0	711	32	529.0	12.0	5.7	Single Age
12WPY24_3	212.00	5.86	0.81100	0.01600	0.09460	0.00210	0.47246	602.3	9.1	583.0	12.0	669	27	583.0	12.0	3.2	Single Age
12WPY24_4	253.20	1.08	0.59810	0.00920	0.07520	0.00140	0.47105	475.7	5.8	467.2	8.5	534	25	467.2	8.5	1.8	Single Age
12WPY24_5	284.00	1.66	0.93300	0.01600	0.10940	0.00220	0.61921	668.4	8.2	669.0	13.0	666	21	669.0	13.0	0.1	Single Age
12WPY24_6	140.00	1.18	10.26000	0.18000	0.46430	0.00820	0.63910	2456.0	16.0	2457.0	36.0	2467	14	2467.0	14.0	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY24_7	82.60	2.43	0.72100	0.01800	0.08800	0.00190	0.45517	552.0	11.0	544.0	11.0	573	29	544.0	11.0	1.4	Single Age
12WPY24_8	211.00	0.69	0.81700	0.01300	0.09800	0.00200	0.54752	606.9	7.3	603.0	12.0	632	23	603.0	12.0	0.6	Single Age
12WPY24_9	244.70	0.51	0.74100	0.01100	0.09000	0.00160	0.48464	562.4	6.2	555.5	9.6	602	25	555.5	9.6	1.2	Single Age
12WPY24_10	381.00	1.85	0.39230	0.00790	0.05410	0.00100	0.50697	336.5	5.6	339.4	6.1	340	26	339.4	6.1	0.9	Single Age
12WPY24_11	183.00	1.73	0.58100	0.01600	0.07390	0.00200	0.19381	464.0	10.0	460.0	12.0	508	33	460.0	12.0	0.9	Single Age
12WPY24_12	235.00	1.48	1.16900	0.02200	0.13000	0.00230	0.64884	788.0	9.7	788.0	13.0	795	21	788.0	13.0	0.0	Single Age
12WPY24_13	279.00	1.99	0.75600	0.01400	0.09260	0.00170	0.61472	571.9	7.8	571.0	10.0	578	20	571.0	10.0	0.2	Single Age
12WPY24_15	380.00	9.30	0.87200	0.02300	0.10180	0.00280	0.47705	636.0	12.0	625.0	16.0	733	38	625.0	16.0	1.7	Single Age
12WPY24_16	527.00	3.55	0.41100	0.01600	0.04780	0.00270	0.65464	349.0	11.0	301.0	17.0	684	76	DISC	DISC	13.8	Rim
12WPY24_16	122.80	1.11	0.93100	0.03600	0.10050	0.00350	0.47002	671.0	20.0	617.0	20.0	838	58	617.0	20.0	8.0	Rim
12WPY24_16	170.00	0.88	1.23700	0.04600	0.13420	0.00590	0.76273	817.0	21.0	811.0	34.0	821	51	811.0	34.0	0.7	Core
12WPY24_17	255.10	0.94	0.79500	0.01600	0.09140	0.00210	0.29728	595.0	10.0	564.0	12.0	696	36	564.0	12.0	5.2	Single Age
12WPY24_18	89.10	0.97	1.67800	0.06400	0.16300	0.00600	0.72644	1005.0	23.0	973.0	33.0	1079	33	973.0	33.0	3.2	Single Age
12WPY24_19	208.00	0.71	0.76800	0.01800	0.09220	0.00170	0.19999	578.0	11.0	568.0	10.0	626	23	568.0	10.0	1.7	Single Age
12WPY24_20	210.00	0.66	0.83400	0.01700	0.10060	0.00240	0.61204	614.7	9.3	618.0	14.0	615	26	618.0	14.0	0.5	Single Age
12WPY24_21	384.00	1.67	0.72100	0.02800	0.08170	0.00250	0.22957	550.0	17.0	506.0	15.0	763	81	506.0	15.0	8.0	Single Age
12WPY24_22	454.00	3.49	6.87000	0.13000	0.30440	0.00600	0.63370	2092.0	17.0	1712.0	30.0	2484	18	DISC	DISC	31.1	Single Age
12WPY24_24	134.00	0.53	1.69200	0.03100	0.16800	0.00330	0.51054	1004.0	12.0	1001.0	18.0	995	19	1001.0	18.0	0.3	Single Age
12WPY24_25	232.10	1.14	1.78700	0.03300	0.17230	0.00280	0.58725	1041.0	12.0	1024.0	15.0	1066	22	1024.0	15.0	1.6	Single Age
12WPY24_26	256.30	1.31	5.63000	0.12000	0.34470	0.00900	0.68660	1919.0	18.0	1907.0	43.0	1947	24	1947.0	24.0	2.1	Single Age
12WPY24_27	132.00	1.25	0.34250	0.00720	0.04810	0.00110	0.41752	298.8	5.5	302.7	6.9	269	29	302.7	6.9	1.3	Single Age
12WPY24_28	208.00	2.46	0.47800	0.01000	0.06420	0.00130	0.43127	396.4	7.0	401.2	7.9	385	25	401.2	7.9	1.2	Single Age
12WPY24_29	626.00	19.40	0.39600	0.01700	0.05370	0.00250	0.65990	338.0	12.0	337.0	16.0	422	41	337.0	16.0	0.3	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY24_29	115.40	1.34	0.76600	0.02500	0.09390	0.00230	0.25900	577.0	14.0	579.0	14.0	590	41	579.0	14.0	0.3	Core
12WPY24_30	257.00	24.10	0.38010	0.00960	0.05240	0.00130	0.53605	326.6	7.1	328.9	7.9	323	30	328.9	7.9	0.7	Single Age
12WPY24_31	733.00	1.89	0.41080	0.00760	0.05490	0.00120	0.70302	350.1	5.3	344.8	7.2	380	21	344.8	7.2	1.5	Single Age
12WPY24_33	163.00	2.06	11.14000	0.22000	0.46000	0.01100	0.76989	2542.0	18.0	2437.0	50.0	2615	15	2615.0	15.0	6.8	Single Age
12WPY24_34	133.10	1.11	0.85200	0.01400	0.10190	0.00170	0.48658	626.2	7.8	625.0	10.0	643	21	625.0	10.0	0.2	Single Age
12WPY24_35	55.70	0.90	0.64700	0.02600	0.07660	0.00340	0.43341	506.0	16.0	475.0	20.0	598	55	475.0	20.0	6.1	Single Age
12WPY24_37	19.75	29.80	6.39000	0.28000	0.36700	0.01400	0.78484	2032.0	39.0	2026.0	64.0	2068	30	2068.0	30.0	2.0	Single Age
12WPY24_38	78.40	0.65	1.28400	0.03200	0.13660	0.00280	0.46057	837.0	14.0	825.0	16.0	868	31	825.0	16.0	1.4	Single Age
12WPY24_39	83.10	0.20	5.06600	0.08400	0.31960	0.00640	0.52085	1829.0	14.0	1786.0	31.0	1890	14	1890.0	14.0	5.5	Single Age
12WPY24_40	68.50	0.92	1.61000	0.04600	0.16010	0.00430	0.69550	972.0	18.0	957.0	24.0	1018	28	957.0	24.0	1.5	Single Age
12WPY24_41	130.80	3.88	1.56300	0.03000	0.15750	0.00350	0.55538	956.0	12.0	945.0	20.0	1000	17	945.0	20.0	1.2	Single Age
12WPY24_42	67.00	1.28	1.00600	0.03000	0.11140	0.00270	0.37707	710.0	16.0	681.0	15.0	821	44	681.0	15.0	4.1	Single Age
12WPY24_43	227.00	0.56	0.86900	0.04800	0.09720	0.00460	0.75125	634.0	26.0	598.0	27.0	748	43	598.0	27.0	5.7	Rim
12WPY24_43	231.40	0.86	0.87900	0.02700	0.10140	0.00380	0.24961	640.0	15.0	622.0	22.0	744	66	622.0	22.0	2.8	Core
12WPY24_44	149.40	0.67	1.67000	0.03400	0.16120	0.00430	0.71905	996.0	13.0	963.0	24.0	1063	21	963.0	24.0	3.3	Single Age
12WPY24_45	619.00	37.40	0.42300	0.01500	0.05610	0.00190	0.55624	358.0	11.0	352.0	12.0	409	44	352.0	12.0	1.7	Rim
12WPY24_45	82.30	0.36	0.77200	0.02900	0.09550	0.00390	0.55624	580.0	17.0	588.0	23.0	575	42	588.0	23.0	1.4	Core
12WPY24_46	196.00	11.30	0.73200	0.05100	0.09050	0.00590	0.36468	557.0	30.0	558.0	35.0	601	95	558.0	35.0	0.2	Rim
12WPY24_46	197.00	2.37	8.07000	0.19000	0.34800	0.01100	0.64102	2237.0	21.0	1930.0	55.0	2561	22	2561.0	22.0	24.6	Core
12WPY24_47	84.30	0.94	1.09200	0.02200	0.12280	0.00290	0.14880	749.0	11.0	746.0	17.0	778	28	746.0	17.0	0.4	Single Age
12WPY24_48	55.70	1.85	1.17100	0.03300	0.13220	0.00580	0.61213	787.0	15.0	800.0	33.0	763	47	800.0	33.0	1.7	Single Age
12WPY24_49	412.00	14.30	0.77400	0.01900	0.09370	0.00220	0.72981	581.0	11.0	577.0	13.0	640	29	577.0	13.0	0.7	Single Age
12WPY24_50	365.00	1.32	0.31890	0.00760	0.04520	0.00120	0.48495	281.7	6.0	285.9	7.2	270	36	285.9	7.2	1.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY24_51	104.30	0.17	1.53000	0.05000	0.15280	0.00460	0.54402	939.0	20.0	919.0	25.0	980	36	919.0	25.0	2.1	Single Age
12WPY24_52	128.10	2.52	1.69800	0.03400	0.16670	0.00340	0.65400	1006.0	13.0	993.0	19.0	1048	20	993.0	19.0	1.3	Single Age
12WPY24_53	434.00	1.72	0.35300	0.00760	0.04860	0.00110	0.66630	306.7	5.7	306.0	6.5	356	24	306.0	6.5	0.2	Single Age
12WPY24_54	211.00	1.25	4.75000	0.09900	0.28800	0.00760	0.79595	1774.0	18.0	1635.0	39.0	1951	16	1951.0	16.0	16.2	Single Age
12WPY24_55	54.60	1.08	1.38200	0.03300	0.14380	0.00470	0.48996	880.0	14.0	865.0	27.0	955	21	865.0	27.0	1.7	Single Age
12WPY24_56	562.00	13.30	0.90300	0.05500	0.10540	0.00450	0.59591	653.0	30.0	646.0	26.0	707	76	646.0	26.0	1.1	Rim
12WPY24_56	283.20	2.80	2.96000	0.14000	0.19290	0.00790	0.93983	1395.0	37.0	1135.0	42.0	1836	22	DISC	DISC	18.6	Core
12WPY24_57	233.50	1.91	0.83100	0.01700	0.09940	0.00230	0.54576	613.3	9.4	611.0	13.0	649	24	611.0	13.0	0.4	Single Age
12WPY24_58	60.30	1.10	1.79400	0.04300	0.17210	0.00470	0.46360	1044.0	16.0	1023.0	26.0	1113	31	1023.0	26.0	2.0	Single Age
12WPY24_59	148.00	1.26	7.07000	0.22000	0.30700	0.01000	0.86372	2122.0	29.0	1723.0	50.0	2526	16	DISC	DISC	31.8	Single Age
12WPY24_60	242.50	1.98	0.30700	0.01200	0.03950	0.00120	0.30364	272.0	9.6	249.8	7.5	445	46	249.8	7.5	8.2	Rim
12WPY24_60	250.20	1.46	0.37400	0.01200	0.04920	0.00140	0.51752	322.4	8.8	309.6	8.4	405	29	309.6	8.4	4.0	Core
12WPY24_62	79.90	0.86	0.93000	0.01900	0.10880	0.00220	0.40520	666.0	10.0	666.0	13.0	678	24	666.0	13.0	0.0	Single Age
12WPY24_63	116.40	1.77	0.87700	0.02100	0.10480	0.00260	0.60540	638.0	11.0	642.0	15.0	617	24	642.0	15.0	0.6	Single Age
12WPY24_64	256.00	1.35	0.34280	0.00790	0.04720	0.00120	0.47299	298.9	6.0	297.0	7.1	316	35	297.0	7.1	0.6	Single Age
12WPY24_65	212.50	0.90	0.83600	0.02000	0.10180	0.00300	0.65643	617.0	11.0	625.0	17.0	621	28	625.0	17.0	1.3	Single Age
12WPY24_66	292.00	2.16	0.83300	0.01600	0.09890	0.00210	0.61467	615.0	9.1	608.0	13.0	618	25	608.0	13.0	1.1	Single Age
12WPY24_67	246.00	4.76	0.90400	0.02700	0.10490	0.00280	0.65490	656.0	15.0	643.0	16.0	702	30	643.0	16.0	2.0	Single Age
12WPY24_68	508.00	0.93	1.17100	0.02900	0.12150	0.00370	0.80315	786.0	14.0	739.0	21.0	950	22	739.0	21.0	6.0	Single Age
12WPY24_69	135.90	1.30	1.51800	0.02500	0.15710	0.00290	0.31599	937.0	10.0	940.0	16.0	933	22	940.0	16.0	0.3	Single Age
12WPY24_70	277.00	1.33	10.40000	0.37000	0.44200	0.01800	0.72964	2468.0	34.0	2358.0	79.0	2598	26	2598.0	26.0	9.2	Single Age
12WPY24_71	128.80	0.76	5.25800	0.09100	0.33360	0.00630	0.62792	1860.0	15.0	1855.0	30.0	1871	16	1871.0	16.0	0.9	Single Age
12WPY24_72	323.00	5.46	0.47700	0.02500	0.05860	0.00320	0.55267	401.0	19.0	367.0	19.0	606	35	367.0	19.0	8.5	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY24_72	655.00	2.02	0.61400	0.01500	0.07660	0.00260	0.75369	487.4	9.9	476.0	15.0	523	26	476.0	15.0	2.3	Core
12WPY24_73	164.00	2.38	0.92700	0.02200	0.11050	0.00280	0.60076	666.0	12.0	675.0	16.0	663	25	675.0	16.0	1.4	Single Age
12WPY24_74	93.00	1.26	1.82300	0.05900	0.17500	0.00640	0.32014	1053.0	21.0	1039.0	35.0	1084	62	1039.0	35.0	1.3	Single Age
12WPY24_75	264.00	0.65	1.92800	0.02800	0.18140	0.00300	0.44773	1091.1	9.9	1074.0	16.0	1115	23	1074.0	16.0	1.6	Single Age
12WPY24_76	1155.00	5.12	0.39720	0.00620	0.05237	0.00095	0.57348	339.5	4.5	329.0	5.8	432	17	329.0	5.8	3.1	Single Age
12WPY24_77	77.90	0.49	3.75500	0.07100	0.25710	0.00630	0.62218	1582.0	15.0	1474.0	32.0	1723	21	1723.0	21.0	14.5	Single Age
12WPY24_78	254.00	1.12	0.85700	0.01600	0.10280	0.00190	0.48066	627.6	8.6	630.0	11.0	618	25	630.0	11.0	0.4	Single Age
12WPY24_79	61.70	1.54	0.96900	0.02300	0.11140	0.00230	0.39854	689.0	12.0	681.0	14.0	732	34	681.0	14.0	1.2	Single Age
12WPY24_80	163.00	0.60	1.13600	0.02500	0.12130	0.00270	0.57101	770.0	12.0	738.0	16.0	846	22	738.0	16.0	4.2	Single Age
12WPY24_81	234.00	1.91	1.58600	0.02200	0.16220	0.00280	0.54399	964.0	8.8	969.0	15.0	964	19	969.0	15.0	0.5	Single Age
12WPY24_83	73.20	1.05	1.76300	0.03400	0.17440	0.00370	0.61233	1030.0	12.0	1035.0	20.0	1036	24	1035.0	20.0	0.5	Single Age
12WPY24_84	122.50	0.43	11.90000	0.20000	0.49200	0.01200	0.72244	2595.0	15.0	2576.0	53.0	2608	19	2608.0	19.0	1.2	Single Age
12WPY24_85	76.20	1.21	3.36900	0.09100	0.18730	0.00590	0.74892	1496.0	21.0	1106.0	32.0	2103	21	DISC	DISC	26.1	Single Age
12WPY24_86	77.40	2.08	0.95400	0.01900	0.11170	0.00200	0.32252	679.3	9.7	682.0	12.0	718	26	682.0	12.0	0.4	Single Age
12WPY24_87	20.39	0.97	1.26200	0.05500	0.13190	0.00530	0.47109	830.0	26.0	798.0	30.0	944	53	798.0	30.0	3.9	Single Age
12WPY24_88	176.00	0.99	1.66400	0.03100	0.16650	0.00320	0.62736	995.0	12.0	992.0	17.0	1008	19	992.0	17.0	0.3	Single Age
12WPY24_89	329.00	1.14	0.89100	0.01700	0.10340	0.00230	0.66794	646.0	9.3	634.0	13.0	697	23	634.0	13.0	1.9	Single Age
12WPY24_90	248.00	1.99	0.34830	0.00730	0.04810	0.00100	0.27924	303.2	5.5	302.6	6.4	330	39	302.6	6.4	0.2	Single Age
12WPY24_91	219.00	0.49	0.82900	0.01500	0.09800	0.00200	0.53029	614.3	8.1	602.0	11.0	654	24	602.0	11.0	2.0	Single Age
12WPY24_92	279.00	0.81	0.80200	0.01600	0.09710	0.00180	0.53315	597.2	8.8	599.0	11.0	623	21	599.0	11.0	0.3	Single Age
12WPY24_93	169.50	0.46	1.68600	0.07200	0.16450	0.00630	0.68416	1001.0	27.0	981.0	35.0	1047	34	981.0	35.0	2.0	Single Age
12WPY24_95	485.00	1.41	0.34850	0.00620	0.04644	0.00082	0.15161	303.5	4.7	292.6	5.1	378	29	292.6	5.1	3.6	Single Age
12WPY24_96	171.30	2.62	1.26200	0.05300	0.13780	0.00470	0.76603	830.0	23.0	831.0	27.0	822	33	831.0	27.0	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY24_97	301.00	3.05	0.59190	0.00930	0.07480	0.00130	0.50034	471.8	5.9	465.0	7.9	502	19	465.0	7.9	1.4	Single Age
12WPY24_98	318.00	0.56	0.38750	0.00970	0.05230	0.00120	0.31751	332.2	7.1	328.6	7.4	315	32	328.6	7.4	1.1	Single Age
12WPY24_99	216.60	4.89	0.40500	0.01300	0.05420	0.00160	0.28012	345.1	9.3	340.3	9.8	390	45	340.3	9.8	1.4	Rim
12WPY24_99	177.50	1.56	0.61900	0.02500	0.07500	0.00340	0.66110	492.0	17.0	466.0	21.0	578	41	466.0	21.0	5.3	Core
12WPY24_101	48.20	0.71	5.78000	0.26000	0.35400	0.01800	0.75408	1941.0	38.0	1949.0	88.0	1908	15	1908.0	15.0	2.1	Single Age
12WPY24_102	218.80	1.68	0.35010	0.00790	0.04658	0.00085	0.51147	304.5	5.9	293.5	5.2	362	26	293.5	5.2	3.6	Single Age
12WPY24_103	84.00	0.88	1.62700	0.03400	0.15900	0.00350	0.26419	980.0	13.0	951.0	19.0	1070	29	951.0	19.0	3.0	Single Age
12WPY24_105	201.00	8.06	6.26000	0.13000	0.36030	0.00900	0.69271	2013.0	19.0	1982.0	42.0	2049	17	2049.0	17.0	3.3	Single Age
12WPY24_106	424.00	0.82	1.80300	0.06000	0.17090	0.00930	0.95220	1043.0	23.0	1014.0	52.0	1067	28	1014.0	52.0	2.8	Single Age
12WPY24_107	92.30	1.96	1.73800	0.03200	0.16940	0.00350	0.60329	1023.0	12.0	1011.0	20.0	1056	17	1011.0	20.0	1.2	Single Age
12WPY24_108	61.50	1.09	0.88300	0.02200	0.10510	0.00210	0.37611	641.0	12.0	644.0	12.0	649	36	644.0	12.0	0.5	Single Age
12WPY24_109	112.40	0.53	1.72900	0.02500	0.17210	0.00370	0.35061	1018.8	9.4	1023.0	20.0	1013	23	1023.0	20.0	0.4	Single Age
12WPY24_110	194.00	1.35	0.82300	0.01400	0.09840	0.00240	0.37199	609.3	7.8	605.0	14.0	619	33	605.0	14.0	0.7	Single Age
12WPY24_111	203.00	0.88	0.35400	0.00840	0.04900	0.00094	0.42529	307.4	6.3	308.3	5.8	285	27	308.3	5.8	0.3	Single Age
12WPY24_112	248.90	1.09	0.98900	0.02400	0.10690	0.00290	0.65319	697.0	12.0	654.0	17.0	820	25	654.0	17.0	6.2	Single Age
12WPY24_113	97.80	1.01	3.77600	0.06800	0.27740	0.00580	0.62694	1586.0	14.0	1577.0	29.0	1579	21	1579.0	21.0	0.1	Single Age
12WPY24_115	116.20	1.34	6.81000	0.12000	0.37550	0.00890	0.66455	2085.0	16.0	2053.0	42.0	2111	20	2111.0	20.0	2.7	Single Age
12WPY24_116	301.00	1.29	0.76000	0.02100	0.09200	0.00290	0.78956	573.0	12.0	567.0	17.0	597	23	567.0	17.0	1.0	Single Age
12WPY24_119	146.00	1.60	0.86000	0.01300	0.10400	0.00220	0.53578	629.9	7.1	638.0	13.0	615	26	638.0	13.0	1.3	Single Age
12WPY24_120	101.50	0.57	1.66100	0.03900	0.16530	0.00480	0.59021	993.0	15.0	985.0	27.0	1029	31	985.0	27.0	0.8	Single Age
12WPY24_121	65.00	0.87	1.60200	0.04500	0.16350	0.00470	0.52654	969.0	17.0	975.0	26.0	999	31	975.0	26.0	0.6	Single Age
12WPY24_122	278.00	1.57	0.93100	0.01400	0.10790	0.00190	0.50137	667.5	7.6	660.0	11.0	691	21	660.0	11.0	1.1	Single Age
12WPY24_123	105.70	0.64	0.92000	0.02100	0.10780	0.00210	0.62910	664.0	11.0	660.0	12.0	700	25	660.0	12.0	0.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY24_124	131.90	1.25	0.91200	0.01600	0.10610	0.00190	0.36133	657.5	8.7	650.0	11.0	681	24	650.0	11.0	1.1	Single Age
12WPY24_125	224.00	3.56	0.61600	0.01300	0.07760	0.00170	0.49821	486.6	8.3	482.0	10.0	518	28	482.0	10.0	0.9	Single Age
12WPY25_1	386.00	1.04	1.02200	0.01200	0.10600	0.00130	0.71044	714.8	5.8	649.3	7.5	924	13	649.3	7.5	9.2	Single Age
12WPY25_2	33.00	0.60	1.76000	0.03100	0.17390	0.00170	0.36102	1030.0	11.0	1033.7	9.1	1027	23	1033.7	9.1	0.4	Single Age
12WPY25_3	379.00	0.76	0.87810	0.00840	0.10373	0.00075	0.24920	639.8	4.5	636.2	4.4	666	13	636.2	4.4	0.6	Single Age
12WPY25_4	734.00	1.62	0.83600	0.01500	0.09850	0.00160	0.41542	616.8	8.3	605.3	9.2	683	20	605.3	9.2	1.9	Single Age
12WPY25_5	54.50	0.60	1.68100	0.02500	0.16540	0.00170	0.26677	1000.6	9.2	986.5	9.4	1059	18	986.5	9.4	1.4	Single Age
12WPY25_6	144.90	0.84	0.73110	0.00990	0.09018	0.00098	0.61476	556.9	5.8	556.5	5.8	577	12	556.5	5.8	0.1	Single Age
12WPY25_7	707.00	247.00	0.92720	0.00650	0.10750	0.00083	0.59508	667.1	3.6	658.2	4.9	702	8	658.2	4.9	1.3	Single Age
12WPY25_8	441.00	24.30	0.85000	0.03200	0.09920	0.00310	0.85617	623.0	17.0	610.0	18.0	679	12	610.0	18.0	2.1	Single Age
12WPY25_9	82.20	1.57	1.82200	0.01900	0.18010	0.00210	0.46371	1054.1	6.4	1067.0	11.0	1041	14	1067.0	11.0	1.2	Single Age
12WPY25_11	45.00	1.86	1.22600	0.01800	0.13460	0.00150	0.33023	811.7	8.1	813.9	8.3	828	21	813.9	8.3	0.3	Single Age
12WPY25_12	168.10	1.23	1.77800	0.01100	0.17550	0.00140	0.51735	1037.4	4.1	1042.4	7.7	1038	7	1042.4	7.7	0.5	Single Age
12WPY25_13	198.20	0.48	0.86400	0.01000	0.10251	0.00086	0.13035	632.1	5.4	629.1	5.0	643	15	629.1	5.0	0.5	Single Age
12WPY25_14	44.50	0.49	1.70000	0.03600	0.16770	0.00180	0.49046	1008.0	13.0	999.5	9.9	1018	21	999.5	9.9	0.8	Single Age
12WPY25_15	220.00	0.97	0.35050	0.00460	0.04859	0.00058	0.51509	305.4	3.4	305.8	3.6	327	16	305.8	3.6	0.1	Single Age
12WPY25_16	163.00	2.33	11.34000	0.30000	0.47000	0.01300	0.97860	2553.0	25.0	2487.0	57.0	2600	5	2600.1	5.3	4.3	Single Age
12WPY25_17	211.00	1.45	1.02260	0.00920	0.11667	0.00096	0.76433	715.0	4.6	711.4	5.5	714	7	711.4	5.5	0.5	Single Age
12WPY25_18	1066.00	16.30	1.25000	0.02800	0.13380	0.00350	0.91418	823.0	13.0	809.0	20.0	868	17	809.0	20.0	1.7	Rim
12WPY25_18	342.50	1.18	1.73300	0.01400	0.17370	0.00170	0.60266	1020.9	5.1	1032.5	9.6	995	10	1032.5	9.6	1.1	Core
12WPY25_19	464.00	13.46	0.85400	0.01500	0.10150	0.00170	0.85982	626.8	8.3	623.0	10.0	646	9	623.0	10.0	0.6	Single Age
12WPY25_22	347.00	0.71	0.75520	0.00860	0.08940	0.00100	0.56802	571.1	5.0	551.7	6.1	649	13	551.7	6.1	3.4	Single Age
12WPY25_23	175.60	3.86	1.05400	0.01400	0.12050	0.00140	0.35719	730.3	7.0	733.5	8.2	729	13	733.5	8.2	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY25_24	114.80	0.72	0.72900	0.01200	0.08277	0.00087	0.54022	555.4	6.9	512.6	5.2	737	21	512.6	5.2	7.7	Single Age
12WPY25_25	203.00	1.06	6.24800	0.05600	0.37310	0.00380	0.77739	2011.7	8.0	2043.0	18.0	1978	6	1978.4	6.1	3.3	Single Age
12WPY25_26	856.00	0.68	0.65200	0.01400	0.07380	0.00240	0.95356	509.1	8.8	459.0	15.0	731	19	459.0	15.0	9.8	Single Age
12WPY25_27	80.80	1.56	1.86600	0.01900	0.18060	0.00160	0.37121	1069.6	6.8	1070.3	8.7	1065	12	1070.3	8.7	0.1	Single Age
12WPY25_28	291.00	1.45	5.63000	0.04900	0.32780	0.00350	0.79382	1920.2	7.4	1827.0	17.0	2027	6	2026.5	5.9	9.8	Single Age
12WPY25_29	127.00	1.55	1.23800	0.01100	0.13470	0.00096	0.49482	817.6	4.8	814.6	5.5	822	10	814.6	5.5	0.4	Single Age
12WPY25_30	51.50	1.82	1.05000	0.01800	0.11570	0.00130	0.51677	728.2	8.9	705.8	7.3	796	18	705.8	7.3	3.1	Single Age
12WPY25_31	251.60	5.25	0.62420	0.00560	0.07930	0.00070	0.44910	492.4	3.5	491.9	4.2	505	10	491.9	4.2	0.1	Single Age
12WPY25_32	320.00	0.88	12.11000	0.11000	0.48930	0.00360	0.81345	2612.6	8.3	2567.0	16.0	2648	5	2648.3	5.2	3.1	Single Age
12WPY25_33	138.70	2.56	0.58840	0.00640	0.07488	0.00063	0.17339	469.7	4.1	465.4	3.8	496	18	465.4	3.8	0.9	Single Age
12WPY25_34	77.30	0.72	25.16000	0.21000	0.67350	0.00540	0.82853	3313.9	8.1	3319.0	21.0	3313	4	3312.5	3.9	0.2	Single Age
12WPY25_35	246.90	0.74	0.74700	0.01300	0.08880	0.00150	0.58486	566.3	7.4	548.6	8.8	654	21	548.6	8.8	3.1	Single Age
12WPY25_36	167.10	2.77	6.22900	0.05700	0.36560	0.00340	0.88071	2008.0	8.1	2008.0	16.0	2010	6	2010.2	5.6	0.1	Single Age
12WPY25_37	190.20	0.93	1.21600	0.01200	0.13440	0.00130	0.70390	809.3	5.5	812.9	7.1	792	8	812.9	7.1	0.4	Single Age
12WPY25_38	179.00	2.16	9.82000	0.15000	0.44760	0.00660	0.92541	2419.0	14.0	2383.0	29.0	2446	7	2446.3	7.2	2.6	Single Age
12WPY25_39	110.40	1.38	0.71470	0.00910	0.08797	0.00097	0.46015	547.3	5.4	543.5	5.8	572	15	543.5	5.8	0.7	Single Age
12WPY25_40	97.90	0.80	5.48700	0.03800	0.34850	0.00250	0.57695	1898.3	5.9	1927.0	12.0	1875	7	1874.9	7.0	2.8	Single Age
12WPY25_41	108.00	2.68	0.85100	0.01400	0.10320	0.00100	0.23523	624.8	7.6	632.9	6.1	602	23	632.9	6.1	1.3	Single Age
12WPY25_42	705.00	0.81	2.19300	0.07200	0.07240	0.00130	0.58915	1182.0	21.0	450.6	7.7	3011	43	DISC	DISC	61.9	Single Age
12WPY25_43	359.00	4.60	0.53700	0.01500	0.04630	0.00180	0.20531	436.0	9.8	292.0	11.0	1340	110	DISC	DISC	33.0	Single Age
12WPY25_44	605.90	2.17	0.33430	0.00350	0.04552	0.00040	0.28201	293.2	2.6	287.0	2.5	346	19	287.0	2.5	2.1	Single Age
12WPY25_45	69.00	1.59	1.16000	0.01700	0.13010	0.00160	0.41495	781.5	7.9	788.2	9.3	759	16	788.2	9.3	0.9	Single Age
12WPY25_46	337.40	1.73	0.34790	0.00750	0.04460	0.00037	0.07902	303.0	5.6	281.3	2.3	482	37	281.3	2.3	7.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY25_47	196.00	2.48	0.36000	0.01100	0.04928	0.00037	0.27738	311.5	7.4	310.1	2.2	325	38	310.1	2.2	0.4	Single Age
12WPY25_48	162.30	0.70	5.41100	0.06300	0.32370	0.00390	0.86973	1888.0	10.0	1807.0	19.0	1985	5	1984.5	5.4	8.9	Single Age
12WPY25_49	245.80	1.06	0.92420	0.00790	0.10881	0.00093	0.63822	664.5	4.2	665.8	5.4	672	8	665.8	5.4	0.2	Single Age
12WPY25_50	412.00	3.68	14.15000	0.30000	0.50060	0.00750	0.95572	2760.0	20.0	2621.0	31.0	2870	11	2870.0	11.0	8.7	Single Age
12WPY25_51	516.00	1.37	0.74700	0.01300	0.08790	0.00220	0.88328	566.1	7.5	543.0	13.0	684	19	543.0	13.0	4.1	Single Age
12WPY25_52	490.00	1.82	0.34720	0.00390	0.04752	0.00043	0.68890	302.6	2.9	299.3	2.7	328	11	299.3	2.7	1.1	Single Age
12WPY25_53	272.90	1.02	13.10000	0.13000	0.51860	0.00510	0.96034	2686.5	9.1	2693.0	22.0	2685	4	2684.5	4.2	0.3	Single Age
12WPY25_54	287.00	3.51	1.52700	0.01700	0.15850	0.00170	0.81764	941.0	6.8	948.1	9.6	945	8	948.1	9.6	0.8	Single Age
12WPY25_55	204.00	0.74	0.93010	0.00830	0.11033	0.00094	0.51214	668.2	4.5	674.6	5.4	643	11	674.6	5.4	1.0	Single Age
12WPY25_56	209.00	0.67	0.42650	0.00740	0.05598	0.00036	0.02703	360.5	5.2	351.1	2.2	439	28	351.1	2.2	2.6	Single Age
12WPY25_57	54.40	1.68	0.58700	0.02200	0.06610	0.00270	0.80487	468.0	14.0	413.0	16.0	783	27	DISC	DISC	11.8	Rim
12WPY25_57	136.90	2.53	0.86200	0.01700	0.10170	0.00180	0.29210	631.2	9.1	624.0	11.0	641	25	624.0	11.0	1.1	Core
12WPY25_58	87.00	1.34	0.71700	0.01000	0.08690	0.00110	0.46633	548.4	6.1	537.0	6.4	597	19	537.0	6.4	2.1	Single Age
12WPY25_59	540.00	2.22	0.88880	0.00780	0.10458	0.00071	0.61722	645.6	4.2	641.2	4.2	671	9	641.2	4.2	0.7	Single Age
12WPY25_60	325.00	5.56	0.39070	0.00410	0.05336	0.00045	0.12615	334.8	3.0	335.1	2.8	345	17	335.1	2.8	0.1	Single Age
12WPY25_61	224.90	1.08	9.67000	0.11000	0.39670	0.00530	0.84288	2403.0	10.0	2153.0	24.0	2622	8	2621.9	8.4	17.9	Single Age
12WPY25_62	444.00	5.74	0.97000	0.01800	0.11120	0.00100	0.43241	687.7	8.9	679.9	5.9	737	27	679.9	5.9	1.1	Single Age
12WPY25_64	133.10	0.56	1.20400	0.01600	0.13240	0.00140	0.01856	801.9	7.2	801.5	8.0	806	19	801.5	8.0	0.0	Single Age
12WPY25_65	106.60	1.20	0.35980	0.00600	0.04941	0.00051	0.09195	311.9	4.5	310.9	3.1	332	27	310.9	3.1	0.3	Single Age
12WPY25_66	29.10	1.43	1.70000	0.03400	0.16860	0.00320	0.47135	1007.0	13.0	1004.0	18.0	1028	19	1004.0	18.0	0.3	Single Age
12WPY25_67	167.00	1.94	5.57400	0.08900	0.35380	0.00620	0.96586	1915.0	14.0	1952.0	29.0	1881	5	1880.5	5.2	3.8	Single Age
12WPY25_68	195.80	0.66	12.72000	0.11000	0.50160	0.00480	0.85605	2658.6	8.5	2620.0	21.0	2684	4	2683.7	4.3	2.4	Single Age
12WPY25_69	29.12	0.65	0.95900	0.01800	0.11320	0.00140	0.11229	682.2	9.6	691.0	8.1	662	28	691.0	8.1	1.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY25_70	421.00	1.23	0.83880	0.00730	0.09879	0.00094	0.67140	618.4	4.0	607.3	5.5	668	12	607.3	5.5	1.8	Single Age
12WPY25_71	187.00	1.62	0.54700	0.04300	0.05433	0.00069	0.24839	437.0	27.0	341.1	4.2	920	140	DISC	DISC	21.9	Single Age
12WPY25_72	88.20	0.53	0.88000	0.01100	0.10470	0.00098	0.36289	640.6	6.0	641.9	5.7	640	19	641.9	5.7	0.2	Single Age
12WPY25_73	380.00	2.80	0.91200	0.01200	0.10680	0.00160	0.71305	658.0	6.6	654.0	9.6	672	13	654.0	9.6	0.6	Single Age
12WPY25_74	40.30	1.71	1.76800	0.02300	0.16130	0.00180	0.26977	1033.2	8.5	963.8	9.9	1193	21	963.8	9.9	6.7	Single Age
12WPY25_75	78.10	1.73	0.90000	0.01000	0.10872	0.00088	0.04023	651.4	5.6	665.2	5.1	629	20	665.2	5.1	2.1	Single Age
12WPY25_76	61.60	1.35	5.42900	0.04400	0.33370	0.00260	0.59015	1889.1	6.9	1857.0	13.0	1924	7	1924.2	7.4	3.5	Single Age
12WPY25_77	202.80	1.27	1.31800	0.01400	0.14000	0.00150	0.50365	853.2	6.0	844.8	8.4	870	15	844.8	8.4	1.0	Single Age
12WPY25_78	210.00	2.01	0.41740	0.00690	0.05652	0.00066	0.35387	354.0	4.9	354.4	4.0	354	23	354.4	4.0	0.1	Single Age
12WPY25_79	176.00	1.18	0.82600	0.01200	0.09930	0.00110	0.56860	611.4	6.6	610.1	6.5	623	19	610.1	6.5	0.2	Single Age
12WPY25_80	124.90	1.93	8.86000	0.15000	0.38320	0.00550	0.92884	2331.0	14.0	2090.0	26.0	2545	7	2544.5	6.6	17.9	Single Age
12WPY25_81	221.00	5.50	5.29100	0.08200	0.33840	0.00400	0.92120	1867.0	13.0	1878.0	19.0	1861	9	1860.5	8.6	0.9	Single Age
12WPY25_82	130.00	1.70	5.96000	0.29000	0.35000	0.01300	0.98024	1956.0	44.0	1932.0	63.0	2002	22	2002.0	22.0	3.5	Single Age
12WPY25_83	259.00	0.67	0.89430	0.00810	0.10627	0.00060	0.48329	648.5	4.3	651.0	3.5	641	11	651.0	3.5	0.4	Single Age
12WPY25_84	100.00	1.55	1.77400	0.02000	0.17510	0.00190	0.62741	1035.5	7.4	1040.0	11.0	1034	12	1040.0	11.0	0.4	Single Age
12WPY25_85	932.00	3.32	0.81160	0.00980	0.09590	0.00130	0.87093	603.2	5.5	590.2	7.4	663	8	590.2	7.4	2.2	Single Age
12WPY25_86	725.00	1.51	0.38080	0.00290	0.05166	0.00034	0.39310	327.6	2.2	324.7	2.1	342	11	324.7	2.1	0.9	Single Age
12WPY25_87	87.40	0.42	1.64400	0.01600	0.16720	0.00110	0.45417	987.5	6.0	996.6	6.1	976	10	996.6	6.1	0.9	Single Age
12WPY25_88	69.60	0.73	0.85500	0.01400	0.10160	0.00110	0.05120	626.9	7.4	623.8	6.1	645	19	623.8	6.1	0.5	Single Age
12WPY25_89	218.00	0.90	0.90590	0.00850	0.10836	0.00096	0.57847	654.7	4.5	663.2	5.6	624	11	663.2	5.6	1.3	Single Age
12WPY25_90	255.90	2.06	1.22480	0.00650	0.13532	0.00086	0.46673	812.3	3.0	818.1	4.9	794	8	818.1	4.9	0.7	Single Age
12WPY25_91	100.60	0.58	0.94400	0.01100	0.11124	0.00090	0.24845	675.5	6.1	679.9	5.2	661	19	679.9	5.2	0.7	Single Age
12WPY25_92	106.00	1.10	0.95500	0.01200	0.11253	0.00097	0.33798	680.4	6.0	687.4	5.6	666	14	687.4	5.6	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY25_94	490.00	1.08	7.29600	0.07900	0.29420	0.00290	0.91839	2147.6	9.7	1664.0	15.0	2649	4	DISC	DISC	37.2	Single Age
12WPY25_95	295.00	5.99	2.98300	0.03100	0.24470	0.00310	0.52323	1403.2	7.9	1411.0	16.0	1401	14	1401.0	14.0	0.7	Rim
12WPY25_95	154.20	1.62	6.67900	0.05700	0.40480	0.00470	0.76466	2069.7	7.5	2191.0	22.0	1951	6	1950.9	5.8	12.3	Core
12WPY25_96	395.00	1.69	0.83500	0.01600	0.10170	0.00190	0.74138	616.8	8.9	624.0	11.0	602	22	624.0	11.0	1.2	Single Age
12WPY25_97	864.00	9.66	1.39100	0.04100	0.12290	0.00260	0.81554	885.0	17.0	747.0	15.0	1247	27	DISC	DISC	15.6	Rim
12WPY25_97	243.20	1.18	5.86400	0.07000	0.29120	0.00330	0.82894	1955.0	10.0	1647.0	17.0	2292	13	2292.0	13.0	28.1	Core
12WPY25_98	138.00	4.81	4.88000	0.11000	0.30130	0.00510	0.90940	1801.0	18.0	1697.0	25.0	1906	12	1906.0	12.0	11.0	Single Age
12WPY25_99	47.10	2.39	1.36300	0.02500	0.14510	0.00280	0.34080	873.0	11.0	873.0	16.0	875	24	873.0	16.0	0.0	Single Age
12WPY25_100	1140.00	1.12	1.19500	0.03700	0.12170	0.00430	0.95839	797.0	17.0	740.0	25.0	969	11	740.0	25.0	7.2	Single Age
12WPY25_101	136.30	1.07	0.35420	0.00420	0.04877	0.00047	0.25215	308.2	3.1	307.0	2.9	331	21	307.0	2.9	0.4	Single Age
12WPY25_102	79.17	0.98	0.76100	0.01300	0.09150	0.00120	0.41069	574.4	7.3	564.4	7.0	618	18	564.4	7.0	1.7	Single Age
12WPY25_103	149.00	1.73	1.01230	0.00940	0.11640	0.00091	0.35868	709.8	4.7	709.8	5.3	715	11	709.8	5.3	0.0	Single Age
12WPY25_104	596.00	2.20	0.79240	0.00770	0.09471	0.00090	0.75184	592.4	4.4	583.3	5.3	640	7	583.3	5.3	1.5	Single Age
12WPY25_105	170.00	0.38	7.00900	0.04100	0.39240	0.00260	0.68483	2112.3	5.2	2134.0	12.0	2091	5	2091.3	4.5	2.0	Single Age
12WPY25_106	47.30	1.96	0.87300	0.04100	0.09500	0.00120	0.26297	633.0	20.0	585.1	7.0	845	80	585.1	7.0	7.6	Single Age
12WPY25_107	76.99	2.10	3.61900	0.03300	0.27030	0.00240	0.64482	1553.3	7.2	1542.0	12.0	1567	7	1566.5	7.3	1.6	Single Age
12WPY25_108	317.00	0.63	1.77900	0.04700	0.14770	0.00140	0.24572	1036.0	17.0	887.8	7.9	1373	46	DISC	DISC	14.3	Single Age
12WPY25_109	146.90	1.39	0.40170	0.00820	0.05064	0.00054	0.16178	342.6	5.9	318.4	3.3	507	40	318.4	3.3	7.1	Single Age
12WPY25_110	120.00	0.63	5.62300	0.05300	0.33720	0.00350	0.94603	1919.2	8.2	1873.0	17.0	1971	7	1970.8	6.8	5.0	Single Age
12WPY25_111	615.00	0.39	0.38170	0.00420	0.05175	0.00050	0.74625	328.2	3.0	325.2	3.0	357	8	325.2	3.0	0.9	Single Age
12WPY25_113	325.00	1.02	1.64700	0.01000	0.16460	0.00130	0.55610	989.1	3.8	982.5	7.0	1003	7	982.5	7.0	0.7	Single Age
12WPY25_114	96.20	0.51	2.18600	0.02100	0.20190	0.00200	0.55753	1177.1	6.8	1187.0	11.0	1151	9	1187.0	11.0	0.8	Single Age
12WPY25_115	237.70	1.51	0.37300	0.00420	0.04946	0.00050	0.41072	321.8	3.1	311.2	3.1	405	16	311.2	3.1	3.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY25_116	55.90	0.62	10.00600	0.06300	0.44440	0.00310	0.66069	2435.1	5.8	2370.0	14.0	2495	6	2494.9	5.7	5.0	Single Age
12WPY25_118	155.30	0.87	0.88100	0.00960	0.10439	0.00076	0.17244	642.1	5.3	640.1	4.4	649	20	640.1	4.4	0.3	Single Age
12WPY25_119	401.00	2.48	0.84700	0.02400	0.10100	0.00300	0.96182	622.0	13.0	620.0	17.0	628	10	620.0	17.0	0.3	Single Age
12WPY25_120	97.40	0.52	12.78000	0.15000	0.50280	0.00560	0.89554	2663.0	11.0	2628.0	23.0	2688	6	2687.5	6.0	2.2	Single Age
12WPY25_121	193.00	1.01	0.77480	0.00960	0.09488	0.00098	0.39554	582.4	5.5	584.3	5.8	579	14	584.3	5.8	0.3	Single Age
12WPY25_122	741.00	5.39	0.55130	0.00670	0.06894	0.00083	0.65667	446.3	4.5	429.7	5.0	526	14	429.7	5.0	3.7	Single Age
12WPY25_123	411.00	2.01	0.41500	0.01500	0.03520	0.00210	0.01822	352.0	11.0	223.0	13.0	1420	150	DISC	DISC	36.6	Single Age
12WPY25_124	137.00	3.16	0.89800	0.01300	0.10510	0.00120	0.49956	650.4	7.0	644.2	6.9	672	15	644.2	6.9	1.0	Single Age
12WPY25_125	182.00	0.76	0.76820	0.00960	0.09057	0.00060	0.41933	578.5	5.5	558.9	3.6	656	16	558.9	3.6	3.4	Single Age
12WPY25_126	502.00	3.45	8.17400	0.07500	0.35510	0.00330	0.84497	2251.1	8.1	1961.0	15.0	2521	6	2521.0	5.8	22.2	Single Age
12WPY25_127	291.00	1.35	0.36920	0.00370	0.05073	0.00036	0.51051	319.3	2.8	319.0	2.2	318	12	319.0	2.2	0.1	Single Age
12WPY25_128	87.50	1.23	0.36710	0.00730	0.04941	0.00056	0.05783	317.3	5.4	310.9	3.4	369	25	310.9	3.4	2.0	Single Age
12WPY26_1	160.90	0.80	0.84300	0.01500	0.10140	0.00180	0.82164	620.5	8.5	623.0	11.0	614	32	623.0	11.0	0.4	Single Age
12WPY26_2	21.66	1.50	17.00000	0.26000	0.56510	0.00910	0.84868	2933.0	15.0	2886.0	38.0	2960	20	2960.0	20.0	2.5	Single Age
12WPY26_3	214.90	0.99	0.83400	0.01100	0.10030	0.00130	0.57949	616.5	6.2	615.9	7.4	620	28	615.9	7.4	0.1	Single Age
12WPY26_4	227.50	1.23	1.06700	0.01100	0.12030	0.00140	0.53089	736.9	5.6	732.5	7.9	758	24	732.5	7.9	0.6	Single Age
12WPY26_5	255.40	1.39	1.71600	0.02400	0.16690	0.00220	0.80321	1014.9	8.7	995.0	12.0	1059	17	995.0	12.0	2.0	Single Age
12WPY26_6	165.30	2.34	1.53900	0.02500	0.15450	0.00230	0.81545	945.0	10.0	926.0	13.0	990	19	926.0	13.0	2.0	Single Age
12WPY26_7	117.00	1.71	0.86100	0.02500	0.10250	0.00250	0.68328	630.0	14.0	629.0	15.0	656	43	629.0	15.0	0.2	Single Age
12WPY26_8	547.00	104.00	0.40600	0.01600	0.05430	0.00200	0.79759	345.0	11.0	342.0	13.0	361	59	342.0	13.0	0.9	Single Age
12WPY26_9	220.00	7.02	9.64000	0.17000	0.42630	0.00730	0.91527	2398.0	17.0	2287.0	33.0	2499	14	2499.0	14.0	8.5	Single Age
12WPY26_10	112.60	0.53	0.82400	0.01200	0.09890	0.00110	0.25366	610.8	6.7	608.2	6.4	610	37	608.2	6.4	0.4	Single Age
12WPY26_11	69.00	0.45	11.95000	0.22000	0.49200	0.00970	0.91299	2600.0	18.0	2577.0	41.0	2620	15	2620.0	15.0	1.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY26_12	313.00	2.82	1.72500	0.05100	0.14160	0.00390	0.80157	1017.0	19.0	853.0	22.0	1355	35	DISC	DISC	16.1	Single Age
12WPY26_13	90.50	1.00	0.66100	0.01400	0.08310	0.00110	0.38160	514.7	8.3	514.4	6.8	527	44	514.4	6.8	0.1	Single Age
12WPY26_14	172.00	0.99	0.77400	0.01100	0.09540	0.00140	0.44362	581.8	6.4	587.1	8.4	567	32	587.1	8.4	0.9	Single Age
12WPY26_15	1140.00	4.06	4.42000	0.15000	0.25230	0.00890	0.86757	1728.0	27.0	1449.0	46.0	2072	27	DISC	DISC	30.1	Rim
12WPY26_15	667.00	0.88	10.72000	0.41000	0.42700	0.01400	0.96255	2494.0	35.0	2288.0	63.0	2673	16	2673.0	16.0	14.4	Core
12WPY26_16	241.00	0.96	12.21000	0.10000	0.49330	0.00470	0.81593	2620.0	7.9	2587.0	20.0	2649	9	2648.6	9.2	2.3	Single Age
12WPY26_17	222.60	0.70	0.85200	0.01000	0.10120	0.00110	0.50814	625.5	5.5	621.1	6.7	644	24	621.1	6.7	0.7	Single Age
12WPY26_18	286.00	2.19	0.34570	0.00940	0.04810	0.00120	0.66649	301.2	7.1	302.5	7.6	282	64	302.5	7.6	0.4	Single Age
12WPY26_19	482.00	3.55	5.31000	0.11000	0.30890	0.00630	0.92345	1870.0	18.0	1735.0	31.0	2033	14	2033.0	14.0	14.7	Single Age
12WPY26_20	236.00	1.14	0.87100	0.02000	0.10290	0.00220	0.86626	635.0	11.0	631.0	13.0	640	32	631.0	13.0	0.6	Single Age
12WPY26_21	204.20	2.64	0.82900	0.01100	0.09890	0.00110	0.43255	612.5	6.2	607.7	6.2	646	27	607.7	6.2	0.8	Single Age
12WPY26_22	342.00	3.36	0.36420	0.00600	0.04872	0.00090	0.55964	315.2	4.5	306.6	5.5	381	41	306.6	5.5	2.7	Single Age
12WPY26_23	149.00	0.82	1.11900	0.01900	0.12300	0.00200	0.71922	763.1	9.0	747.0	11.0	809	26	747.0	11.0	2.1	Single Age
12WPY26_24	262.00	1.00	10.67000	0.19000	0.43480	0.00930	0.89896	2495.0	16.0	2325.0	42.0	2622	16	2622.0	16.0	11.3	Single Age
12WPY26_25	463.00	0.65	0.73300	0.01100	0.08850	0.00120	0.76570	557.8	6.6	546.9	6.9	612	23	546.9	6.9	2.0	Single Age
12WPY26_26	37.20	0.89	0.93700	0.04000	0.11150	0.00400	0.66765	669.0	21.0	681.0	23.0	708	66	681.0	23.0	1.8	Single Age
12WPY26_27	299.30	1.67	0.73980	0.00880	0.09080	0.00100	0.58266	562.0	5.1	560.3	6.0	572	24	560.3	6.0	0.3	Single Age
12WPY26_28	277.00	2.96	0.89400	0.01100	0.10560	0.00150	0.69345	648.1	6.0	647.2	8.8	646	21	647.2	8.8	0.1	Single Age
12WPY26_29	297.00	8.40	0.53950	0.00980	0.06901	0.00093	0.75561	437.7	6.5	430.1	5.6	460	27	430.1	5.6	1.7	Single Age
12WPY26_30	201.00	1.34	0.96900	0.01600	0.11240	0.00160	0.65173	688.5	8.3	686.7	9.3	681	27	686.7	9.3	0.3	Single Age
12WPY26_31	31.20	2.52	1.86600	0.06900	0.16560	0.00340	0.24275	1064.0	24.0	987.0	19.0	1244	65	987.0	19.0	7.2	Single Age
12WPY26_32	168.00	1.40	0.96600	0.01500	0.11260	0.00190	0.56469	687.1	7.8	688.0	11.0	674	31	688.0	11.0	0.1	Single Age
12WPY26_33	136.00	0.28	10.38000	0.21000	0.42200	0.00920	0.88654	2468.0	18.0	2278.0	43.0	2634	18	2634.0	18.0	13.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY26_34	222.00	1.57	1.33300	0.02700	0.13880	0.00240	0.78585	864.0	12.0	838.0	13.0	933	27	838.0	13.0	3.0	Single Age
12WPY26_35	276.00	0.35	0.74500	0.01400	0.08940	0.00190	0.83028	564.6	8.4	552.0	11.0	600	28	552.0	11.0	2.2	Single Age
12WPY26_36	410.00	2.26	0.34400	0.00500	0.04733	0.00050	0.29098	300.1	3.8	298.1	3.1	304	31	298.1	3.1	0.7	Single Age
12WPY26_37	198.00	1.07	5.23800	0.07300	0.33420	0.00540	0.76552	1858.0	12.0	1857.0	26.0	1855	22	1855.0	22.0	0.1	Single Age
12WPY26_38	99.20	0.66	9.29000	0.29000	0.40300	0.01100	0.93184	2368.0	28.0	2184.0	52.0	2524	18	2524.0	18.0	13.5	Single Age
12WPY26_39	440.00	1.07	0.78300	0.01100	0.09160	0.00140	0.64963	587.0	6.3	564.6	8.4	647	28	564.6	8.4	3.8	Single Age
12WPY26_40	343.00	1.61	0.33640	0.00570	0.04640	0.00066	0.59722	294.3	4.4	292.3	4.1	330	34	292.3	4.1	0.7	Single Age
12WPY26_41	309.00	4.50	1.66000	0.02300	0.16170	0.00230	0.79513	993.0	8.7	966.0	13.0	1039	21	966.0	13.0	2.7	Single Age
12WPY26_42	154.00	12.40	0.98000	0.03100	0.11070	0.00300	0.72737	692.0	16.0	676.0	18.0	746	42	676.0	18.0	2.3	Rim
12WPY26_42	164.40	0.90	1.65400	0.04300	0.16470	0.00420	0.81245	990.0	16.0	983.0	23.0	1000	33	983.0	23.0	0.7	Core
12WPY26_43	19.00	0.89	0.80000	0.02900	0.09430	0.00240	0.34756	596.0	16.0	580.0	14.0	646	74	580.0	14.0	2.7	Single Age
12WPY26_44	229.00	1.03	0.34720	0.00830	0.04670	0.00100	0.59574	302.3	6.2	294.3	6.4	346	43	294.3	6.4	2.6	Single Age
12WPY26_45	61.00	0.99	2.78000	0.14000	0.21580	0.00560	0.77355	1331.0	25.0	1263.0	29.0	1438	38	1438.0	38.0	12.2	Single Age
12WPY26_46	235.00	1.44	0.85300	0.01000	0.09941	0.00097	0.45377	626.1	5.5	610.9	5.7	662	25	610.9	5.7	2.4	Single Age
12WPY26_47	58.00	3.28	0.72000	0.04000	0.08520	0.00310	0.71998	550.0	23.0	527.0	18.0	660	110	527.0	18.0	4.2	Rim
12WPY26_47	194.00	3.02	1.04400	0.04300	0.11790	0.00360	0.90320	723.0	21.0	718.0	21.0	728	38	718.0	21.0	0.7	Core
12WPY26_48	242.00	2.05	0.34450	0.00530	0.04870	0.00059	0.26398	301.0	4.1	306.5	3.6	262	42	306.5	3.6	1.8	Single Age
12WPY26_49	104.70	1.14	0.89000	0.02200	0.10650	0.00270	0.83789	645.0	12.0	652.0	16.0	615	34	652.0	16.0	1.1	Single Age
12WPY26_50	124.00	0.62	6.82100	0.07600	0.36890	0.00460	0.85977	2086.0	10.0	2023.0	22.0	2139	15	2139.0	15.0	5.4	Single Age
12WPY26_51	275.00	1.34	0.77500	0.01200	0.09220	0.00110	0.41138	582.1	6.7	568.4	6.6	629	28	568.4	6.6	2.4	Single Age
12WPY26_52	79.90	1.65	0.62300	0.01400	0.08070	0.00130	0.41468	490.9	8.7	499.9	7.9	444	46	499.9	7.9	1.8	Single Age
12WPY26_53	231.00	4.60	0.90070	0.00940	0.10551	0.00095	0.56950	651.9	5.0	646.6	5.6	684	22	646.6	5.6	0.8	Single Age
12WPY26_54	114.10	1.72	1.08800	0.01700	0.12090	0.00170	0.68421	746.8	8.4	736.0	10.0	778	30	736.0	10.0	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY26_55	256.00	2.21	0.37680	0.00740	0.05053	0.00097	0.61902	324.4	5.5	317.7	5.9	353	38	317.7	5.9	2.1	Single Age
12WPY26_56	59.00	1.89	0.83900	0.02000	0.09340	0.00140	0.11779	619.0	11.0	575.3	8.0	773	53	575.3	8.0	7.1	Single Age
12WPY26_57	65.30	1.52	0.87600	0.01700	0.10100	0.00150	0.14816	638.1	9.3	619.9	8.8	705	43	619.9	8.8	2.9	Single Age
12WPY26_58	133.00	1.12	1.39800	0.06800	0.14800	0.01100	0.65199	887.0	29.0	887.0	64.0	900	120	887.0	64.0	0.0	Single Age
12WPY26_59	368.00	5.33	1.01800	0.01200	0.11570	0.00150	0.64322	713.1	5.7	705.6	8.4	750	22	705.6	8.4	1.1	Single Age
12WPY26_60	568.00	2.90	0.53500	0.01700	0.06320	0.00180	0.77255	435.0	11.0	395.0	11.0	663	72	395.0	11.0	9.2	Rim
12WPY26_60	103.80	11.67	0.85400	0.01400	0.09900	0.00110	0.08346	628.1	8.2	608.6	6.6	682	45	608.6	6.6	3.1	Core
12WPY26_61	67.00	0.90	1.67700	0.03200	0.16020	0.00160	0.07633	999.0	12.0	957.6	9.0	1079	36	957.6	9.0	4.1	Single Age
12WPY26_62	179.90	1.02	1.77600	0.02600	0.17460	0.00270	0.68302	1038.6	9.8	1039.0	14.0	1051	24	1039.0	14.0	0.0	Single Age
12WPY26_63	294.00	1.54	1.01400	0.01700	0.11580	0.00180	0.72602	710.3	8.7	706.0	11.0	743	26	706.0	11.0	0.6	Single Age
12WPY26_64	49.90	0.54	4.31900	0.07100	0.26380	0.00360	0.38268	1695.0	13.0	1509.0	18.0	1930	24	1930.0	24.0	21.8	Single Age
12WPY26_65	128.80	1.01	0.33310	0.00640	0.04644	0.00053	0.06553	292.4	5.0	292.6	3.3	285	49	292.6	3.3	0.1	Single Age
12WPY26_66	114.20	1.92	0.79100	0.01200	0.09250	0.00110	0.38069	592.4	7.0	570.5	6.8	675	33	570.5	6.8	3.7	Single Age
12WPY26_67	227.30	3.02	0.83390	0.00810	0.09943	0.00081	0.32642	615.6	4.5	611.0	4.8	630	24	611.0	4.8	0.7	Single Age
12WPY26_68	169.00	2.32	1.10200	0.02000	0.12280	0.00230	0.15921	753.8	9.8	747.0	13.0	777	48	747.0	13.0	0.9	Rim
12WPY26_68	48.80	0.69	1.55600	0.04500	0.15850	0.00290	0.54771	952.0	18.0	948.0	16.0	941	45	948.0	16.0	0.4	Core
12WPY26_69	265.00	3.86	0.89700	0.02600	0.09800	0.00300	0.54444	650.0	14.0	602.0	18.0	847	63	602.0	18.0	7.4	Rim
12WPY26_69	107.20	4.57	1.05700	0.01600	0.12100	0.00190	0.25734	732.1	7.7	736.0	11.0	729	38	736.0	11.0	0.5	Core
12WPY26_70	79.90	1.25	12.35000	0.14000	0.48520	0.00600	0.84675	2630.0	11.0	2549.0	26.0	2693	12	2693.0	12.0	5.3	Single Age
12WPY26_71	74.30	0.76	5.32600	0.06100	0.33840	0.00380	0.55468	1874.0	10.0	1879.0	18.0	1885	20	1885.0	20.0	0.3	Single Age
12WPY26_72	24.91	1.97	0.82300	0.02500	0.09970	0.00200	0.28396	610.0	13.0	615.0	12.0	628	59	615.0	12.0	0.8	Single Age
12WPY26_73	370.00	2.39	1.01200	0.01300	0.11460	0.00150	0.77044	709.4	6.5	699.5	8.5	746	19	699.5	8.5	1.4	Single Age
12WPY26_74	100.80	5.52	6.52000	0.12000	0.36460	0.00640	0.78321	2050.0	16.0	2002.0	30.0	2085	19	2085.0	19.0	4.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY26_75	650.00	1.66	0.40540	0.00610	0.05539	0.00074	0.66315	345.9	4.3	347.5	4.5	331	24	347.5	4.5	0.5	Single Age
12WPY26_76	388.00	1.40	0.34450	0.00560	0.04756	0.00068	0.57386	300.4	4.3	299.5	4.2	313	39	299.5	4.2	0.3	Single Age
12WPY26_77	27.97	1.30	0.89200	0.02500	0.10590	0.00220	0.11868	646.0	13.0	649.0	13.0	652	73	649.0	13.0	0.5	Single Age
12WPY26_78	63.70	0.80	1.64100	0.03100	0.16370	0.00240	0.24675	985.0	12.0	977.0	14.0	1009	38	977.0	14.0	0.8	Single Age
12WPY26_79	13.30	1.33	0.83100	0.03300	0.09840	0.00210	0.21278	614.0	19.0	605.0	12.0	671	90	605.0	12.0	1.5	Single Age
12WPY26_80	139.30	1.84	0.56280	0.00850	0.07225	0.00076	0.44937	453.1	5.5	449.7	4.5	466	30	449.7	4.5	0.8	Single Age
12WPY26_81	307.00	2.75	0.38300	0.01900	0.05230	0.00240	0.72897	329.0	14.0	329.0	15.0	368	71	329.0	15.0	0.0	Rim
12WPY26_81	8.34	1.74	0.79400	0.04700	0.09770	0.00440	0.11094	594.0	27.0	600.0	26.0	550	130	600.0	26.0	1.0	Core
12WPY26_82	216.00	0.88	1.72400	0.01500	0.16940	0.00130	0.52356	1017.2	5.6	1009.7	7.0	1049	17	1009.7	7.0	0.7	Single Age
12WPY26_83	104.30	0.98	1.24100	0.02200	0.13700	0.00170	0.18684	818.0	10.0	827.3	9.8	812	33	827.3	9.8	1.1	Single Age
12WPY26_84	128.20	1.80	0.34300	0.01600	0.04660	0.00170	0.63203	299.0	12.0	294.0	10.0	386	91	294.0	10.0	1.7	Single Age
12WPY26_85	191.60	2.34	0.59450	0.00740	0.07470	0.00081	0.39095	473.5	4.7	464.4	4.9	524	26	464.4	4.9	1.9	Single Age
12WPY26_86	158.20	1.88	0.33950	0.00640	0.04792	0.00079	0.49544	297.2	4.7	301.7	4.9	263	41	301.7	4.9	1.5	Single Age
12WPY26_87	148.00	0.75	1.78800	0.02000	0.17750	0.00200	0.61478	1042.7	7.7	1053.0	11.0	1038	20	1053.0	11.0	1.0	Single Age
12WPY26_88	53.90	1.11	1.15600	0.02800	0.11770	0.00220	0.27697	779.0	13.0	717.0	13.0	986	52	717.0	13.0	8.0	Single Age
12WPY26_89	329.00	1.40	0.35020	0.00960	0.04820	0.00140	0.76569	305.3	7.3	303.4	8.9	317	43	303.4	8.9	0.6	Single Age
12WPY26_90	538.00	1.23	0.84100	0.01700	0.09470	0.00210	0.83861	619.1	9.4	583.0	12.0	796	23	583.0	12.0	5.8	Single Age
12WPY26_91	22.25	0.60	1.11900	0.03700	0.12070	0.00290	0.00669	760.0	18.0	734.0	17.0	807	66	734.0	17.0	3.4	Single Age
12WPY26_92	281.40	0.83	11.16000	0.15000	0.46300	0.00660	0.84057	2540.0	12.0	2455.0	29.0	2605	13	2605.0	13.0	5.8	Single Age
12WPY26_93	164.00	0.99	1.70500	0.03500	0.16720	0.00320	0.78211	1009.0	13.0	996.0	18.0	1047	25	996.0	18.0	1.3	Single Age
12WPY26_94	117.80	1.74	6.81600	0.08600	0.38100	0.00560	0.80261	2087.0	11.0	2080.0	26.0	2103	19	2103.0	19.0	1.1	Single Age
12WPY26_95	106.10	1.17	6.30000	0.08800	0.36590	0.00500	0.66423	2017.0	12.0	2009.0	23.0	2041	19	2041.0	19.0	1.6	Single Age
12WPY26_96	75.80	0.38	1.65500	0.03200	0.16540	0.00260	0.64993	992.0	12.0	986.0	14.0	1036	29	986.0	14.0	0.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY26_97	374.30	0.48	0.79100	0.01300	0.09490	0.00180	0.71765	591.3	7.5	584.0	11.0	625	29	584.0	11.0	1.2	Single Age
12WPY26_98	189.00	0.51	6.23000	0.22000	0.36000	0.01300	0.96417	1999.0	33.0	1978.0	62.0	2043	14	2043.0	14.0	3.2	Single Age
12WPY26_99	151.00	1.29	0.93700	0.01800	0.10900	0.00150	0.44683	670.6	9.3	666.7	8.5	705	39	666.7	8.5	0.6	Single Age
12WPY26_100	479.00	1.77	4.63000	0.19000	0.29400	0.01200	0.99086	1744.0	40.0	1658.0	62.0	1873	13	1873.0	13.0	11.5	Single Age
12WPY26_101	28.00	1.23	9.78000	0.19000	0.40770	0.00710	0.70861	2411.0	18.0	2203.0	33.0	2610	21	2610.0	21.0	15.6	Single Age
12WPY26_102	58.40	0.92	1.15400	0.03000	0.12640	0.00290	0.66757	778.0	14.0	767.0	17.0	813	37	767.0	17.0	1.4	Single Age
12WPY26_103	75.00	160.00	0.90200	0.02500	0.10780	0.00230	0.32666	655.0	14.0	660.0	13.0	635	60	660.0	13.0	0.8	Single Age
12WPY26_104	202.80	1.02	1.74400	0.02400	0.17500	0.00280	0.72286	1024.4	9.0	1039.0	15.0	1032	23	1039.0	15.0	1.4	Single Age
12WPY26_105	2353.00	16.70	0.41600	0.01200	0.05300	0.00160	0.91928	353.2	8.5	333.0	10.0	531	25	333.0	10.0	5.7	Rim
12WPY26_105	147.00	0.77	5.18200	0.08000	0.32560	0.00510	0.82726	1849.0	13.0	1816.0	25.0	1908	17	1908.0	17.0	4.8	Core
12WPY26_106	19.19	1.31	1.60100	0.04600	0.16440	0.00270	0.36239	968.0	18.0	981.0	15.0	954	55	981.0	15.0	1.3	Single Age
12WPY26_107	142.00	1.70	12.80000	0.12000	0.51740	0.00600	0.73062	2666.5	9.0	2691.0	25.0	2661	12	2661.0	12.0	1.1	Single Age
12WPY26_108	388.00	2.39	0.89070	0.00980	0.10619	0.00096	0.62517	646.5	5.3	651.3	5.7	642	18	651.3	5.7	0.7	Single Age
12WPY26_109	157.60	0.38	0.65100	0.01100	0.08100	0.00100	0.36647	509.2	6.9	501.8	6.0	564	40	501.8	6.0	1.5	Single Age
12WPY26_110	59.10	0.82	6.46800	0.09600	0.37170	0.00710	0.66742	2043.0	13.0	2036.0	33.0	2069	26	2069.0	26.0	1.6	Single Age
12WPY26_111	87.00	0.64	0.71700	0.01600	0.08830	0.00210	0.58795	549.5	9.8	545.0	13.0	595	52	545.0	13.0	0.8	Single Age
12WPY26_112	162.00	1.00	0.33230	0.00750	0.04644	0.00074	0.59688	291.0	5.7	292.6	4.5	325	40	292.6	4.5	0.5	Single Age
12WPY26_113	121.30	1.23	1.24100	0.01500	0.13550	0.00180	0.47545	819.0	6.8	819.0	10.0	842	26	819.0	10.0	0.0	Single Age
12WPY26_114	580.00	12.60	0.94700	0.02100	0.11380	0.00360	0.34274	676.0	11.0	695.0	21.0	617	60	695.0	21.0	2.8	Rim
12WPY26_114	119.70	1.30	1.38300	0.02300	0.14790	0.00220	0.73351	882.6	9.6	889.0	13.0	888	26	889.0	13.0	0.7	Core
12WPY26_115	89.30	0.96	1.36800	0.02400	0.14170	0.00190	0.39168	877.8	9.8	854.0	11.0	951	34	854.0	11.0	2.7	Single Age
12WPY26_116	41.70	1.28	1.00800	0.03400	0.11050	0.00170	0.16913	707.0	17.0	677.0	10.0	809	75	677.0	10.0	4.2	Single Age
12WPY26_117	323.00	0.70	0.87500	0.01700	0.10420	0.00210	0.86893	638.6	9.5	639.0	12.0	631	27	639.0	12.0	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY26_119	74.80	1.45	2.59600	0.07100	0.19570	0.00450	0.83735	1301.0	20.0	1151.0	24.0	1588	28	DISC	DISC	11.5	Single Age
12WPY26_120	179.00	2.76	1.50200	0.01500	0.15510	0.00140	0.68246	930.8	5.9	929.7	7.6	952	18	929.7	7.6	0.1	Single Age
12WPY26_121	85.00	1.37	6.60900	0.09800	0.35790	0.00530	0.80264	2059.0	13.0	1972.0	25.0	2160	16	2160.0	16.0	8.7	Single Age
12WPY26_122	282.00	1.92	0.33870	0.00560	0.04650	0.00051	0.51500	296.0	4.2	293.0	3.1	312	33	293.0	3.1	1.0	Single Age
12WPY26_123	201.00	1.19	0.34130	0.00540	0.04740	0.00050	0.19467	298.0	4.1	298.5	3.1	313	38	298.5	3.1	0.2	Single Age
12WPY26_124	298.00	0.79	0.38930	0.00790	0.05196	0.00086	0.54703	332.3	5.3	326.5	5.3	383	34	326.5	5.3	1.7	Single Age
12WPY27_1	39.50	1.56	0.70400	0.01300	0.08618	0.00086	0.00004	540.5	7.9	532.9	5.1	594	52	532.9	5.1	1.4	Single Age
12WPY27_2	170.00	2.22	0.76130	0.00780	0.09223	0.00084	0.43273	574.6	4.5	568.7	4.9	586	22	568.7	4.9	1.0	Single Age
12WPY27_3	43.00	1.46	1.48500	0.05100	0.15280	0.00370	0.87988	920.0	21.0	916.0	21.0	910	37	916.0	21.0	0.4	Single Age
12WPY27_4	122.70	1.18	12.14000	0.14000	0.47380	0.00580	0.83968	2614.0	11.0	2502.0	25.0	2705	11	2705.0	11.0	7.5	Single Age
12WPY27_5	108.80	0.91	1.28100	0.01500	0.13820	0.00160	0.45566	837.2	6.9	834.3	9.1	848	25	834.3	9.1	0.3	Single Age
12WPY27_6	178.00	2.87	0.58210	0.00930	0.07274	0.00079	0.33997	465.6	5.9	452.6	4.8	516	36	452.6	4.8	2.8	Rim
12WPY27_6	142.00	0.78	1.63500	0.02900	0.16240	0.00320	0.65290	984.0	11.0	970.0	18.0	1016	35	970.0	18.0	1.4	Core
12WPY27_7	37.30	0.66	1.32000	0.02500	0.13590	0.00260	0.49212	854.0	11.0	821.0	14.0	955	39	821.0	14.0	3.9	Single Age
12WPY27_8	84.30	1.30	1.10200	0.01200	0.12285	0.00092	0.35422	754.6	6.1	746.9	5.3	792	24	746.9	5.3	1.0	Single Age
12WPY27_9	212.80	27.60	0.80800	0.02100	0.09460	0.00300	0.67026	601.0	12.0	583.0	18.0	681	42	583.0	18.0	3.0	Rim
12WPY27_9	107.70	1.18	1.49600	0.01400	0.15090	0.00130	0.43691	928.7	5.8	905.8	7.5	980	21	905.8	7.5	2.5	Core
12WPY27_10	116.10	1.74	1.16800	0.01500	0.12690	0.00140	0.55581	786.2	7.3	770.3	7.8	846	23	770.3	7.8	2.0	Single Age
12WPY27_11	94.20	0.30	0.82600	0.01200	0.09830	0.00120	0.43196	611.0	6.7	604.4	7.1	641	33	604.4	7.1	1.1	Single Age
12WPY27_12	67.70	0.46	0.87500	0.01700	0.10160	0.00110	0.50260	637.6	9.2	623.7	6.4	690	34	623.7	6.4	2.2	Single Age
12WPY27_13	312.30	2.56	8.29000	0.19000	0.35360	0.00660	0.96674	2262.0	20.0	1950.0	32.0	2555	10	2554.6	9.7	23.7	Single Age
12WPY27_14	275.10	0.69	0.73940	0.00780	0.08566	0.00083	0.63829	561.9	4.5	529.8	4.9	700	18	529.8	4.9	5.7	Single Age
12WPY27_15	286.00	1.42	1.60200	0.01200	0.16060	0.00160	0.75557	970.7	4.8	961.2	9.0	1000	14	961.2	9.0	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY27_16	268.00	2.12	1.03700	0.06700	0.11860	0.00610	0.92651	722.0	33.0	723.0	35.0	725	49	723.0	35.0	0.1	Rim
12WPY27_16	29.20	1.58	1.76000	0.03200	0.17300	0.00220	0.35770	1031.0	12.0	1029.0	12.0	1055	36	1029.0	12.0	0.2	Core
12WPY27_17	255.00	12.40	0.76600	0.00800	0.09400	0.00081	0.49813	577.3	4.6	579.1	4.8	582	20	579.1	4.8	0.3	Single Age
12WPY27_18	1258.00	4.60	0.64900	0.01900	0.07590	0.00220	0.94611	508.0	11.0	472.0	13.0	688	29	472.0	13.0	7.1	Rim
12WPY27_18	335.60	1.76	1.47500	0.02700	0.14650	0.00240	0.84882	921.0	11.0	881.0	13.0	1027	20	881.0	13.0	4.3	Core
12WPY27_19	100.90	1.41	0.87800	0.01100	0.10340	0.00100	0.53172	639.4	6.2	634.0	5.8	667	26	634.0	5.8	0.8	Single Age
12WPY27_20	158.30	2.30	3.01000	0.02300	0.24320	0.00220	0.72592	1410.7	6.0	1403.0	12.0	1425	12	1425.0	12.0	1.5	Single Age
12WPY27_21	753.00	28.30	0.92800	0.01400	0.10680	0.00160	0.88884	666.0	7.5	653.9	9.1	698	14	653.9	9.1	1.8	Single Age
12WPY27_22	439.00	0.67	0.78310	0.00590	0.09407	0.00069	0.53784	587.2	3.3	579.5	4.1	616	16	579.5	4.1	1.3	Single Age
12WPY27_23	637.00	2.84	0.62300	0.01500	0.07370	0.00240	0.87563	491.2	9.7	458.0	15.0	662	33	458.0	15.0	6.8	Rim
12WPY27_23	387.00	0.75	0.88600	0.01900	0.10130	0.00200	0.83283	644.0	10.0	622.0	11.0	719	25	622.0	11.0	3.4	Core
12WPY27_24	188.00	0.98	0.41470	0.00600	0.05570	0.00050	0.47126	353.1	4.3	349.4	3.1	376	28	349.4	3.1	1.0	Single Age
12WPY27_25	159.00	1.49	1.56200	0.01500	0.15510	0.00150	0.62887	954.8	6.1	929.5	8.3	1023	15	929.5	8.3	2.6	Single Age
12WPY27_26	147.00	1.23	1.34500	0.01800	0.14190	0.00160	0.64395	866.1	7.8	855.3	8.9	896	24	855.3	8.9	1.2	Single Age
12WPY27_27	273.00	1.51	1.48850	0.00960	0.15510	0.00100	0.43208	925.6	3.9	929.2	5.6	929	15	929.2	5.6	0.4	Single Age
12WPY27_28	180.00	17.16	0.89900	0.01400	0.10580	0.00150	0.81507	650.7	7.2	648.1	8.8	678	19	648.1	8.8	0.4	Single Age
12WPY27_29	57.60	1.94	0.79600	0.01400	0.09280	0.00140	0.37837	594.2	8.0	572.1	8.4	638	43	572.1	8.4	3.7	Single Age
12WPY27_30	377.00	0.59	0.63900	0.01200	0.07530	0.00120	0.82469	501.5	7.5	468.1	7.3	658	19	468.1	7.3	6.7	Rim
12WPY27_30	131.90	0.47	0.76700	0.01400	0.09250	0.00120	0.53194	579.0	7.7	570.0	7.2	613	35	570.0	7.2	1.6	Core
12WPY27_31	237.00	0.78	9.31000	0.15000	0.38530	0.00620	0.92730	2367.0	15.0	2100.0	28.0	2598	10	2598.0	10.0	19.2	Single Age
12WPY27_32	109.90	0.71	10.97900	0.07600	0.45430	0.00380	0.70588	2521.8	6.5	2414.0	17.0	2607	9	2607.2	9.1	7.4	Single Age
12WPY27_33	231.70	3.07	0.87900	0.01200	0.10200	0.00120	0.78593	640.1	6.3	626.1	7.2	691	19	626.1	7.2	2.2	Single Age
12WPY27_34	255.00	7.85	0.55020	0.00710	0.07077	0.00080	0.53796	445.6	4.7	440.7	4.8	464	25	440.7	4.8	1.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY27_35	93.30	0.71	4.82700	0.05200	0.30310	0.00360	0.68932	1788.8	9.1	1706.0	18.0	1878	14	1878.0	14.0	9.2	Single Age
12WPY27_36	41.60	0.34	0.81700	0.02400	0.09050	0.00140	0.06354	605.0	13.0	558.6	8.4	768	65	558.6	8.4	7.7	Single Age
12WPY27_37	162.00	0.68	1.48100	0.04000	0.14960	0.00280	0.76889	924.0	16.0	899.0	16.0	979	37	899.0	16.0	2.7	Rim
12WPY27_37	353.00	0.63	1.82600	0.01900	0.17790	0.00180	0.28839	1054.5	6.8	1055.0	10.0	1072	20	1055.0	10.0	0.0	Core
12WPY27_38	72.80	1.84	1.79800	0.01600	0.17060	0.00140	0.29486	1044.5	5.7	1015.1	7.6	1103	21	1015.1	7.6	2.8	Single Age
12WPY27_39	254.00	2.01	0.87270	0.00890	0.10397	0.00093	0.50774	636.8	4.8	637.6	5.4	644	21	637.6	5.4	0.1	Single Age
12WPY27_40	129.60	185.00	0.75700	0.01000	0.09410	0.00100	0.52215	573.0	5.6	579.6	6.0	556	27	579.6	6.0	1.2	Single Age
12WPY27_41	269.00	0.79	9.30000	0.07100	0.42520	0.00320	0.73274	2367.7	7.0	2284.0	15.0	2446	12	2446.0	12.0	6.6	Single Age
12WPY27_42	55.60	1.89	0.76200	0.01500	0.08960	0.00190	0.52464	574.3	8.9	553.0	11.0	633	46	553.0	11.0	3.7	Single Age
12WPY27_43	96.00	1.26	1.23600	0.01800	0.13580	0.00140	0.44518	818.3	8.0	820.8	8.1	807	30	820.8	8.1	0.3	Single Age
12WPY27_44	499.00	43.40	0.39490	0.00440	0.05394	0.00051	0.79290	337.8	3.2	338.7	3.1	334	18	338.7	3.1	0.3	Single Age
12WPY27_45	984.00	6.00	1.43460	0.00980	0.14710	0.00120	0.77223	903.3	4.1	884.4	6.7	952	10	884.4	6.7	2.1	Single Age
12WPY27_46	134.30	0.98	0.81300	0.00990	0.09842	0.00094	0.30088	603.8	5.5	605.1	5.5	606	28	605.1	5.5	0.2	Single Age
12WPY27_47	164.00	0.88	0.84700	0.01300	0.09865	0.00093	0.48636	623.8	7.1	606.4	5.5	695	30	606.4	5.5	2.8	Single Age
12WPY27_48	114.00	1.38	0.73780	0.00920	0.08741	0.00087	0.55918	560.8	5.4	540.2	5.1	655	24	540.2	5.1	3.7	Single Age
12WPY27_49	272.70	10.86	1.11800	0.02500	0.11580	0.00150	0.78906	761.0	12.0	706.4	8.5	920	28	706.4	8.5	7.2	Single Age
12WPY27_50	29.40	2.22	1.77800	0.02900	0.16700	0.00240	0.63603	1037.0	11.0	997.0	13.0	1102	28	997.0	13.0	3.9	Single Age
12WPY27_51	26.20	1.15	1.38900	0.02900	0.14160	0.00210	0.27910	883.0	12.0	853.0	12.0	961	47	853.0	12.0	3.4	Single Age
12WPY27_52	682.00	10.57	0.86700	0.01700	0.09880	0.00180	0.94055	632.9	9.1	609.0	10.0	724	15	609.0	10.0	3.8	Single Age
12WPY27_53	327.00	4.56	0.76970	0.00920	0.09320	0.00100	0.70325	579.3	5.3	574.6	6.1	592	20	574.6	6.1	0.8	Single Age
12WPY27_54	211.90	1.08	1.55800	0.01700	0.15740	0.00160	0.74632	953.4	6.6	942.0	8.7	986	14	942.0	8.7	1.2	Single Age
12WPY27_55	107.40	0.73	6.11600	0.08000	0.34880	0.00460	0.88391	1992.0	11.0	1928.0	22.0	2057	13	2057.0	13.0	6.3	Single Age
12WPY27_56	112.70	1.10	0.96200	0.01200	0.10780	0.00130	0.47286	683.8	6.3	659.7	7.5	761	25	659.7	7.5	3.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY27_57	760.00	1.41	0.26260	0.00340	0.03533	0.00054	0.82573	236.7	2.7	223.8	3.3	364	17	223.8	3.3	5.4	Single Age
12WPY27_58	49.32	1.13	0.93800	0.01900	0.10620	0.00160	0.53341	671.0	10.0	650.4	9.6	753	35	650.4	9.6	3.1	Single Age
12WPY27_59	344.00	2.23	0.68130	0.00970	0.08470	0.00110	0.76434	527.2	5.9	523.9	6.7	545	21	523.9	6.7	0.6	Single Age
12WPY27_60	61.60	0.60	5.82500	0.05300	0.34410	0.00320	0.64641	1950.5	7.7	1906.0	16.0	1998	15	1998.0	15.0	4.6	Single Age
12WPY27_61	538.00	1.49	0.66780	0.00820	0.07770	0.00110	0.76835	519.2	5.0	483.0	6.4	698	18	483.0	6.4	7.0	Single Age
12WPY27_62	232.00	1.61	0.67690	0.00730	0.08306	0.00073	0.55273	524.7	4.4	514.9	4.4	568	20	514.9	4.4	1.9	Single Age
12WPY27_63	232.00	1.17	0.35480	0.00600	0.04953	0.00055	0.47523	308.6	4.4	311.6	3.4	293	34	311.6	3.4	1.0	Single Age
12WPY27_64	287.00	0.41	0.58000	0.02500	0.06660	0.00300	0.62145	462.0	16.0	415.0	18.0	702	27	DISC	DISC	10.2	Single Age
12WPY27_65	73.60	0.99	0.82800	0.01900	0.09580	0.00120	0.29674	614.1	9.8	589.4	6.9	714	46	589.4	6.9	4.0	Single Age
12WPY27_66	505.00	2.61	0.84100	0.02400	0.09710	0.00200	0.76043	619.0	13.0	597.0	11.0	700	31	597.0	11.0	3.6	Single Age
12WPY27_67	126.60	1.14	1.70000	0.01500	0.16730	0.00130	0.38727	1009.0	5.6	997.1	7.0	1034	18	997.1	7.0	1.2	Single Age
12WPY27_68	261.00	2.05	0.76700	0.01300	0.08830	0.00110	0.50692	578.0	7.3	545.7	6.3	704	24	545.7	6.3	5.6	Rim
12WPY27_68	81.10	2.37	0.86300	0.02000	0.10600	0.00140	0.44034	632.0	11.0	649.4	8.3	583	47	649.4	8.3	2.8	Core
12WPY27_69	146.10	1.29	1.52200	0.01900	0.15360	0.00170	0.63609	939.6	7.4	921.1	9.2	992	20	921.1	9.2	2.0	Single Age
12WPY27_70	163.60	0.88	0.81100	0.01400	0.09750	0.00170	0.67640	603.7	8.1	599.0	10.0	612	30	599.0	10.0	0.8	Single Age
12WPY27_71	147.30	0.89	5.97300	0.06000	0.35070	0.00430	0.70112	1971.3	8.8	1937.0	20.0	2002	15	2002.0	15.0	3.2	Single Age
12WPY27_72	333.00	3.64	7.42200	0.07200	0.39050	0.00410	0.89079	2165.5	9.2	2125.0	19.0	2204	11	2204.0	11.0	3.6	Single Age
12WPY27_73	95.00	1.04	0.96400	0.01400	0.11110	0.00120	0.44553	684.9	7.5	680.1	6.7	705	29	680.1	6.7	0.7	Single Age
12WPY27_74	234.60	0.50	1.47700	0.03000	0.14270	0.00320	0.91569	921.0	12.0	860.0	18.0	1058	16	860.0	18.0	6.6	Single Age
12WPY27_75	192.00	0.60	1.68200	0.02200	0.16100	0.00230	0.71762	1001.1	8.3	962.0	13.0	1073	22	962.0	13.0	3.9	Single Age
12WPY27_76	273.00	0.74	0.80430	0.00780	0.09636	0.00071	0.54311	599.1	4.4	593.0	4.2	620	18	593.0	4.2	1.0	Single Age
12WPY27_77	65.80	0.71	1.57600	0.02800	0.15630	0.00160	0.44252	960.0	11.0	936.3	8.8	1029	34	936.3	8.8	2.5	Single Age
12WPY27_78	310.00	8.60	5.57800	0.06000	0.33640	0.00370	0.92915	1912.0	9.2	1869.0	18.0	1959	10	1958.7	9.5	4.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY27_79	48.90	1.60	4.64000	0.18000	0.30000	0.01200	0.97769	1746.0	38.0	1687.0	63.0	1791	26	1791.0	26.0	5.8	Single Age
12WPY27_80	124.70	1.08	1.15800	0.02000	0.12540	0.00140	0.47288	782.5	9.9	761.5	7.7	835	29	761.5	7.7	2.7	Single Age
12WPY27_81	114.00	2.41	0.86200	0.02800	0.09610	0.00140	0.37587	630.0	15.0	591.7	8.2	761	55	591.7	8.2	6.1	Single Age
12WPY27_82	231.00	1.03	0.74630	0.00900	0.09136	0.00096	0.40267	565.8	5.2	563.5	5.7	580	22	563.5	5.7	0.4	Single Age
12WPY27_83	248.60	1.93	1.01600	0.01100	0.11595	0.00096	0.70028	711.6	5.7	707.2	5.5	721	20	707.2	5.5	0.6	Single Age
12WPY27_84	496.00	2.13	5.62000	0.13000	0.27140	0.00500	0.92351	1918.0	20.0	1547.0	25.0	2348	15	DISC	DISC	34.1	Single Age
12WPY27_85	87.50	0.86	1.50400	0.01900	0.15440	0.00160	0.58444	932.6	7.6	925.6	8.9	956	25	925.6	8.9	0.8	Single Age
12WPY27_86	470.00	18.10	0.89800	0.01000	0.10600	0.00100	0.77761	650.4	5.3	649.4	6.1	671	16	649.4	6.1	0.2	Single Age
12WPY27_87	157.00	2.88	0.76850	0.00800	0.09353	0.00088	0.47286	578.7	4.6	577.0	5.3	583	25	577.0	5.3	0.3	Single Age
12WPY27_88	262.00	1.22	0.90240	0.00940	0.10470	0.00100	0.57832	652.8	5.0	642.1	6.0	706	20	642.1	6.0	1.6	Single Age
12WPY27_89	213.00	2.22	0.96470	0.00960	0.11320	0.00120	0.49974	685.5	5.0	691.1	7.1	687	22	691.1	7.1	0.8	Single Age
12WPY27_90	532.00	3.08	0.49600	0.01700	0.06050	0.00280	0.89149	409.0	12.0	379.0	17.0	544	49	379.0	17.0	7.3	Rim
12WPY27_90	374.00	1.64	0.72100	0.01200	0.08670	0.00120	0.67227	550.8	7.3	536.0	7.0	620	29	536.0	7.0	2.7	Core
12WPY27_91	128.20	1.84	0.34670	0.00540	0.04708	0.00054	0.23075	302.6	4.1	296.6	3.3	346	34	296.6	3.3	2.0	Single Age
12WPY27_92	344.00	1.25	0.81400	0.01000	0.09740	0.00120	0.60683	604.8	5.8	599.3	6.8	627	21	599.3	6.8	0.9	Single Age
12WPY27_93	175.30	1.93	0.96400	0.01300	0.11210	0.00150	0.73266	685.2	6.6	686.0	8.7	694	20	686.0	8.7	0.1	Single Age
12WPY27_94	93.40	1.14	5.81600	0.05500	0.34430	0.00400	0.65487	1948.1	8.2	1909.0	19.0	1991	16	1991.0	16.0	4.1	Single Age
12WPY27_95	572.00	7.80	0.91300	0.04500	0.09730	0.00180	0.79701	661.0	25.0	598.0	11.0	866	69	598.0	11.0	9.5	Rim
12WPY27_95	419.00	14.30	2.41900	0.05000	0.16780	0.00250	0.58574	1248.0	15.0	1000.0	14.0	1708	28	DISC	DISC	19.9	Core
12WPY27_96	349.00	0.62	0.37690	0.00620	0.05129	0.00061	0.37123	324.6	4.5	322.4	3.7	343	36	322.4	3.7	0.7	Single Age
12WPY27_97	487.00	1.29	0.31760	0.00400	0.04421	0.00048	0.52270	280.0	3.1	278.9	3.0	306	27	278.9	3.0	0.4	Single Age
12WPY27_98	150.00	0.49	0.80750	0.00890	0.09694	0.00088	0.17942	600.8	5.0	596.4	5.1	610	27	596.4	5.1	0.7	Single Age
12WPY27_99	334.00	1.62	1.48200	0.03600	0.14860	0.00370	0.86856	921.0	14.0	892.0	21.0	992	20	892.0	21.0	3.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY27_100	119.60	0.30	1.14900	0.01100	0.12440	0.00110	0.42153	776.4	5.4	756.0	6.3	824	22	756.0	6.3	2.6	Single Age
12WPY27_101	37.00	0.80	0.87600	0.01800	0.10210	0.00150	0.29518	639.1	9.6	626.8	9.0	697	45	626.8	9.0	1.9	Single Age
12WPY27_103	144.70	0.48	4.96300	0.04900	0.32250	0.00300	0.74198	1814.7	8.3	1802.0	15.0	1830	12	1830.0	12.0	1.5	Single Age
12WPY27_104	137.20	1.17	1.69300	0.01800	0.16530	0.00170	0.58514	1005.4	6.8	986.2	9.3	1051	18	986.2	9.3	1.9	Single Age
12WPY27_105	53.70	0.81	11.31000	0.15000	0.46030	0.00700	0.85379	2550.0	12.0	2440.0	31.0	2633	13	2633.0	13.0	7.3	Single Age
12WPY27_107	267.50	0.94	1.27100	0.03700	0.09740	0.00100	0.50153	835.0	17.0	599.1	5.9	1494	49	DISC	DISC	28.3	Single Age
12WPY27_108	206.10	1.14	0.95680	0.00910	0.11162	0.00078	0.64156	681.4	4.7	682.1	4.6	679	17	682.1	4.6	0.1	Single Age
12WPY27_109	88.70	0.81	1.33000	0.01700	0.13960	0.00150	0.40245	859.5	7.5	842.1	8.8	913	29	842.1	8.8	2.0	Single Age
12WPY27_110	94.80	0.87	1.17500	0.01600	0.12820	0.00180	0.30922	788.5	7.4	778.0	10.0	829	24	778.0	10.0	1.3	Single Age
12WPY27_111	324.00	1.19	0.76940	0.00650	0.09365	0.00074	0.51831	579.3	3.7	577.1	4.3	587	19	577.1	4.3	0.4	Single Age
12WPY27_112	80.10	0.67	0.74500	0.01500	0.08790	0.00140	0.50701	565.1	8.6	542.8	8.0	649	41	542.8	8.0	3.9	Single Age
12WPY27_113	71.00	1.92	1.16400	0.02000	0.12780	0.00180	0.60088	783.3	9.2	775.0	10.0	814	27	775.0	10.0	1.1	Single Age
12WPY27_114	402.00	0.42	0.80250	0.00960	0.09700	0.00130	0.85019	597.9	5.4	596.5	7.4	617	15	596.5	7.4	0.2	Single Age
12WPY27_115	244.00	1.60	1.87500	0.02100	0.17430	0.00210	0.81205	1071.9	7.3	1037.0	12.0	1127	14	1037.0	12.0	3.3	Single Age
12WPY27_116	173.00	3.73	1.05700	0.02400	0.11530	0.00220	0.82248	731.0	12.0	703.0	12.0	825	26	703.0	12.0	3.8	Single Age
12WPY27_117	104.90	1.33	0.88100	0.01900	0.10200	0.00170	0.72670	643.0	11.0	626.3	9.7	694	40	626.3	9.7	2.6	Single Age
12WPY27_118	118.00	0.96	0.78800	0.01100	0.09526	0.00096	0.42017	589.9	6.3	586.5	5.6	611	28	586.5	5.6	0.6	Single Age
12WPY27_119	89.80	0.73	5.49000	0.10000	0.32710	0.00670	0.93362	1897.0	17.0	1823.0	33.0	1997	15	1997.0	15.0	8.7	Single Age
12WPY27_120	582.00	2.40	0.80300	0.01800	0.08840	0.00190	0.69123	598.0	10.0	546.0	11.0	803	26	546.0	11.0	8.7	Single Age
12WPY27_121	109.20	1.23	11.80900	0.08700	0.47640	0.00400	0.76410	2589.0	6.9	2511.0	18.0	2657	8	2657.3	8.3	5.5	Single Age
12WPY27_122	474.00	1.76	0.34830	0.00430	0.04809	0.00061	0.58361	303.3	3.2	302.8	3.8	311	22	302.8	3.8	0.2	Single Age
12WPY27_123	169.60	5.90	0.64800	0.02200	0.07890	0.00160	0.86164	506.0	13.0	489.6	9.7	557	37	489.6	9.7	3.2	Single Age
12WPY27_124	403.00	0.73	0.80900	0.00560	0.09669	0.00063	0.55037	601.8	3.1	595.0	3.7	619	13	595.0	3.7	1.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_1	238.90	1.77	0.77400	0.01600	0.09310	0.00170	0.60892	582.6	9.2	574.0	10.0	622	24	574.0	10.0	1.5	Single Age
12WPY28_2	558.00	1.85	0.76000	0.01400	0.09360	0.00190	0.48758	573.2	8.1	577.0	11.0	587	22	577.0	11.0	0.7	Single Age
12WPY28_3	287.00	1.09	1.07700	0.04800	0.11490	0.00540	0.82182	741.0	23.0	700.0	31.0	907	31	700.0	31.0	5.5	Rim
12WPY28_3	121.00	0.68	1.66600	0.06200	0.16560	0.00710	0.52796	994.0	24.0	987.0	39.0	983	37	987.0	39.0	0.7	Core
12WPY28_4	511.00	1.25	0.63400	0.01600	0.07480	0.00190	0.78894	499.0	10.0	465.0	11.0	651	18	465.0	11.0	6.8	Single Age
12WPY28_5	353.00	0.88	0.68500	0.01200	0.08580	0.00150	0.57824	529.4	7.4	530.3	9.0	544	18	530.3	9.0	0.2	Single Age
12WPY28_6	141.80	1.46	5.75000	0.13000	0.32470	0.00740	0.72084	1942.0	19.0	1815.0	35.0	2089	22	2089.0	22.0	13.1	Single Age
12WPY28_7	163.00	1.02	0.60500	0.02800	0.06260	0.00290	0.68316	480.0	17.0	392.0	17.0	946	50	DISC	DISC	18.3	Rim
12WPY28_7	147.90	0.87	0.76000	0.01900	0.09250	0.00200	0.27522	573.0	11.0	570.0	12.0	630	47	570.0	12.0	0.5	Core
12WPY28_8	43.70	0.84	0.73700	0.02700	0.08950	0.00220	0.26856	558.0	16.0	552.0	13.0	556	39	552.0	13.0	1.1	Single Age
12WPY28_9	116.00	0.79	1.07400	0.02700	0.11790	0.00290	0.66753	741.0	13.0	718.0	17.0	793	21	718.0	17.0	3.1	Single Age
12WPY28_10	159.70	1.38	1.77300	0.03600	0.17080	0.00420	0.17363	1035.0	13.0	1016.0	23.0	1079	33	1016.0	23.0	1.8	Single Age
12WPY28_11	82.60	1.04	6.58000	0.10000	0.36960	0.00740	0.55977	2057.0	13.0	2026.0	35.0	2094	16	2094.0	16.0	3.2	Single Age
12WPY28_12	562.00	1.98	1.54300	0.03300	0.15680	0.00370	0.70347	946.0	13.0	938.0	20.0	955	20	938.0	20.0	0.8	Single Age
12WPY28_13	100.20	1.79	1.87000	0.03500	0.18190	0.00330	0.38305	1070.0	12.0	1077.0	18.0	1069	24	1077.0	18.0	0.7	Single Age
12WPY28_14	153.90	1.60	0.61000	0.01400	0.07620	0.00160	0.59623	482.6	8.7	473.4	9.5	534	20	473.4	9.5	1.9	Single Age
12WPY28_15	122.00	0.83	2.05300	0.03800	0.18980	0.00340	0.53394	1135.0	13.0	1120.0	18.0	1158	24	1120.0	18.0	1.3	Single Age
12WPY28_16	206.00	1.11	6.66500	0.09500	0.37300	0.00740	0.68034	2069.0	13.0	2046.0	34.0	2095	14	2095.0	14.0	2.3	Single Age
12WPY28_17	96.80	0.45	1.45700	0.02800	0.15210	0.00280	0.30564	912.0	11.0	912.0	16.0	937	24	912.0	16.0	0.0	Single Age
12WPY28_18	160.60	3.37	0.85700	0.01500	0.10360	0.00220	0.59683	630.1	8.4	635.0	13.0	628	22	635.0	13.0	0.8	Single Age
12WPY28_19	584.00	1.54	3.12000	0.11000	0.24700	0.01000	0.79795	1436.0	26.0	1423.0	52.0	1449	33	1449.0	33.0	1.8	Single Age
12WPY28_20	115.00	1.38	1.03600	0.02000	0.11900	0.00250	0.29163	721.0	10.0	724.0	15.0	738	33	724.0	15.0	0.4	Single Age
12WPY28_22	105.10	0.80	1.08200	0.03600	0.12310	0.00260	0.34945	746.0	16.0	748.0	15.0	762	29	748.0	15.0	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_23	145.00	1.67	1.56900	0.03300	0.15940	0.00350	0.69304	958.0	13.0	953.0	19.0	986	20	953.0	19.0	0.5	Single Age
12WPY28_24	174.30	0.80	0.70200	0.01400	0.08870	0.00180	0.41432	539.6	8.2	549.0	10.0	521	22	549.0	10.0	1.7	Single Age
12WPY28_25	454.00	2.62	0.90900	0.01800	0.10600	0.00210	0.52865	655.7	9.5	649.0	12.0	687	23	649.0	12.0	1.0	Single Age
12WPY28_26	334.00	2.69	1.05200	0.02000	0.11900	0.00320	0.68708	728.9	9.7	724.0	18.0	775	32	724.0	18.0	0.7	Single Age
12WPY28_27	64.00	0.47	6.28000	0.22000	0.36800	0.01400	0.81455	2012.0	31.0	2011.0	66.0	1986	22	1986.0	22.0	1.3	Single Age
12WPY28_28	100.70	1.74	0.92600	0.02100	0.10790	0.00210	0.23205	666.0	11.0	660.0	12.0	697	34	660.0	12.0	0.9	Single Age
12WPY28_29	159.80	0.75	1.78200	0.03500	0.17770	0.00310	0.67398	1040.0	13.0	1054.0	17.0	1019	17	1054.0	17.0	1.3	Single Age
12WPY28_30	39.50	17.40	0.86800	0.04200	0.10680	0.00290	0.17164	632.0	23.0	654.0	17.0	558	41	654.0	17.0	3.5	Rim
12WPY28_30	34.90	1.47	1.20600	0.05300	0.12810	0.00380	0.10803	801.0	24.0	776.0	22.0	848	70	776.0	22.0	3.1	Core
12WPY28_31	655.00	4.76	6.54000	0.17000	0.30290	0.00780	0.74409	2048.0	23.0	1710.0	38.0	2426	20	2426.0	20.0	29.5	Single Age
12WPY28_32	206.00	3.34	0.80000	0.01800	0.09690	0.00210	0.27735	596.1	9.9	596.0	12.0	615	30	596.0	12.0	0.0	Single Age
12WPY28_33	746.00	0.51	0.52150	0.00990	0.06190	0.00140	0.65417	425.8	6.6	387.0	8.5	640	22	387.0	8.5	9.1	Single Age
12WPY28_34	291.00	11.00	0.95600	0.03000	0.10940	0.00460	0.51269	681.0	16.0	669.0	27.0	710	50	669.0	27.0	1.8	Rim
12WPY28_34	172.70	2.69	1.09600	0.02200	0.11840	0.00250	0.56647	754.0	10.0	724.0	14.0	826	24	724.0	14.0	4.0	Core
12WPY28_35	715.00	9.90	0.86600	0.02000	0.10240	0.00210	0.52884	635.0	11.0	628.0	12.0	669	28	628.0	12.0	1.1	Single Age
12WPY28_36	267.00	1.30	9.70000	0.36000	0.42800	0.01600	0.66884	2405.0	34.0	2294.0	71.0	2491	14	2491.0	14.0	7.9	Single Age
12WPY28_37	138.70	1.79	0.34950	0.00910	0.04850	0.00120	0.30295	303.9	6.9	305.8	7.1	339	31	305.8	7.1	0.6	Single Age
12WPY28_38	391.00	8.60	0.91000	0.02000	0.10350	0.00270	0.72272	658.0	11.0	635.0	16.0	736	20	635.0	16.0	3.5	Single Age
12WPY28_39	523.00	4.69	0.56800	0.03700	0.07150	0.00500	0.76244	456.0	24.0	445.0	30.0	496	47	445.0	30.0	2.4	Rim
12WPY28_39	206.80	1.15	0.80800	0.02400	0.09490	0.00190	0.22327	600.0	14.0	584.0	11.0	663	35	584.0	11.0	2.7	Core
12WPY28_40	920.00	0.66	1.67900	0.02900	0.16620	0.00350	0.78927	1001.0	11.0	991.0	20.0	1018	15	991.0	20.0	1.0	Single Age
12WPY28_41	107.00	0.78	1.73300	0.03500	0.16900	0.00310	0.38961	1021.0	13.0	1006.0	17.0	1034	27	1006.0	17.0	1.5	Single Age
12WPY28_42	541.00	2.77	0.76400	0.02500	0.09180	0.00220	0.60936	575.0	15.0	566.0	13.0	605	29	566.0	13.0	1.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_43	89.90	0.73	0.95400	0.02100	0.11280	0.00260	0.52700	680.0	11.0	689.0	15.0	672	30	689.0	15.0	1.3	Single Age
12WPY28_44	64.10	0.63	6.74000	0.11000	0.37780	0.00740	0.56030	2076.0	15.0	2069.0	34.0	2098	19	2098.0	19.0	1.4	Single Age
12WPY28_45	11.71	1.55	0.92500	0.07000	0.10450	0.00370	0.20862	658.0	36.0	640.0	22.0	816	91	640.0	22.0	2.7	Single Age
12WPY28_46	256.00	0.70	4.42000	0.11000	0.28110	0.00570	0.74085	1714.0	21.0	1596.0	29.0	1869	16	1869.0	16.0	14.6	Single Age
12WPY28_47	594.00	1.77	0.34900	0.01100	0.04860	0.00130	0.60677	303.4	8.4	305.9	8.1	292	37	305.9	8.1	0.8	Rim
12WPY28_47	70.40	1.07	0.87800	0.04900	0.10140	0.00580	0.70819	638.0	26.0	622.0	34.0	708	65	622.0	34.0	2.5	Core
12WPY28_48	76.20	0.61	1.72000	0.03500	0.17040	0.00380	0.50890	1014.0	13.0	1014.0	21.0	1028	26	1014.0	21.0	0.0	Single Age
12WPY28_49	260.00	1.37	1.86100	0.03900	0.17870	0.00410	0.67907	1066.0	14.0	1059.0	22.0	1077	18	1059.0	22.0	0.7	Single Age
12WPY28_50	96.00	0.33	0.80600	0.01600	0.09720	0.00180	0.43123	599.7	9.1	598.0	11.0	614	29	598.0	11.0	0.3	Single Age
12WPY28_51	394.00	1.00	1.66900	0.02400	0.16340	0.00280	0.54717	997.0	8.9	975.0	15.0	1055	16	975.0	15.0	2.2	Single Age
12WPY28_52	151.10	0.94	6.27000	0.15000	0.36900	0.01400	0.86867	2013.0	22.0	2035.0	64.0	2017	25	2017.0	25.0	0.9	Single Age
12WPY28_53	178.00	1.38	13.42000	0.41000	0.45500	0.02100	0.80595	2716.0	29.0	2412.0	93.0	2955	20	2955.0	20.0	18.4	Single Age
12WPY28_54	216.00	0.48	1.24000	0.02700	0.13490	0.00280	0.41271	817.0	12.0	816.0	16.0	860	31	816.0	16.0	0.1	Single Age
12WPY28_55	115.50	0.82	1.61200	0.02700	0.16350	0.00300	0.53769	976.0	10.0	976.0	17.0	994	23	976.0	17.0	0.0	Single Age
12WPY28_56	447.00	0.58	0.77400	0.02000	0.09110	0.00300	0.46212	584.0	11.0	562.0	18.0	699	41	562.0	18.0	3.8	Rim
12WPY28_56	121.00	1.73	0.93300	0.02600	0.11310	0.00260	0.59173	670.0	13.0	690.0	15.0	603	27	690.0	15.0	3.0	Core
12WPY28_57	445.00	6.73	7.46000	0.11000	0.36220	0.00780	0.68069	2167.0	13.0	1991.0	37.0	2351	15	2351.0	15.0	15.3	Single Age
12WPY28_58	767.00	26.40	0.43000	0.01700	0.05620	0.00260	0.72754	363.0	12.0	353.0	16.0	475	55	353.0	16.0	2.8	Rim
12WPY28_58	194.00	0.95	1.54400	0.06500	0.15670	0.00680	0.59456	947.0	26.0	938.0	38.0	989	23	938.0	38.0	1.0	Core
12WPY28_59	227.20	3.68	0.64300	0.03100	0.07720	0.00330	0.46904	504.0	19.0	479.0	20.0	620	55	479.0	20.0	5.0	Rim
12WPY28_59	190.90	1.14	1.02800	0.02600	0.11730	0.00350	0.47949	717.0	13.0	715.0	20.0	748	37	715.0	20.0	0.3	Core
12WPY28_60	153.00	0.99	0.61800	0.01400	0.07730	0.00160	0.45394	489.1	9.1	480.1	9.8	526	33	480.1	9.8	1.8	Single Age
12WPY28_61	251.00	0.43	1.82200	0.03300	0.17740	0.00360	0.56363	1052.0	12.0	1055.0	20.0	1058	21	1055.0	20.0	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_62	94.40	0.38	1.68200	0.03700	0.16380	0.00440	0.66677	1000.0	14.0	977.0	25.0	1071	23	977.0	25.0	2.3	Single Age
12WPY28_63	62.70	1.31	1.56900	0.03500	0.16010	0.00400	0.65856	956.0	14.0	957.0	22.0	988	28	957.0	22.0	0.1	Single Age
12WPY28_64	123.30	0.45	10.18000	0.32000	0.42700	0.01300	0.87997	2444.0	30.0	2289.0	61.0	2590	15	2590.0	15.0	11.6	Single Age
12WPY28_65	83.00	1.18	0.74900	0.02500	0.08600	0.00290	0.52422	567.0	14.0	532.0	17.0	711	41	532.0	17.0	6.2	Single Age
12WPY28_66	843.00	3.07	1.28800	0.03500	0.12920	0.00390	0.69607	843.0	14.0	783.0	22.0	1008	27	783.0	22.0	7.1	Rim
12WPY28_66	788.00	5.33	1.57500	0.07500	0.15790	0.00440	0.68991	966.0	27.0	945.0	24.0	966	35	945.0	24.0	2.2	Core
12WPY28_67	337.00	2.64	0.85700	0.02400	0.09460	0.00270	0.66019	627.0	13.0	583.0	16.0	800	31	583.0	16.0	7.0	Single Age
12WPY28_68	128.50	0.83	1.60700	0.02800	0.15980	0.00350	0.60042	974.0	11.0	955.0	19.0	1020	24	955.0	19.0	2.0	Single Age
12WPY28_69	416.00	6.05	0.82600	0.02200	0.09780	0.00670	0.20087	611.0	12.0	602.0	39.0	678	43	602.0	39.0	1.5	Rim
12WPY28_69	304.10	1.13	1.58400	0.04600	0.15540	0.00590	0.67757	963.0	18.0	931.0	33.0	1042	27	931.0	33.0	3.3	Core
12WPY28_70	46.80	0.51	0.82800	0.05000	0.10060	0.00320	0.32939	618.0	25.0	618.0	19.0	550	51	618.0	19.0	0.0	Rim
12WPY28_70	102.40	0.73	3.78000	0.14000	0.25060	0.00660	0.70908	1590.0	30.0	1441.0	34.0	1780	27	1780.0	27.0	19.0	Core
12WPY28_71	151.10	4.08	0.61900	0.01300	0.07740	0.00150	0.47093	488.7	8.1	480.4	9.2	521	29	480.4	9.2	1.7	Single Age
12WPY28_72	331.00	1.07	1.41100	0.02700	0.13910	0.00340	0.70474	893.0	11.0	839.0	19.0	1017	18	839.0	19.0	6.0	Single Age
12WPY28_73	274.00	38.30	0.92600	0.02200	0.10810	0.00290	0.55615	666.0	11.0	662.0	17.0	723	27	662.0	17.0	0.6	Single Age
12WPY28_74	530.00	1.19	7.89000	0.13000	0.40050	0.00700	0.73099	2216.0	15.0	2170.0	33.0	2249	16	2249.0	16.0	3.5	Single Age
12WPY28_75	243.90	0.66	1.69600	0.02900	0.16830	0.00310	0.53895	1008.0	11.0	1002.0	17.0	998	20	1002.0	17.0	0.6	Single Age
12WPY28_76	214.00	1.26	1.40000	0.02500	0.15280	0.00330	0.49154	888.0	11.0	916.0	18.0	822	25	916.0	18.0	3.2	Single Age
12WPY28_77	196.00	0.74	5.46000	0.14000	0.33900	0.00870	0.88455	1890.0	24.0	1880.0	42.0	1919	15	1919.0	15.0	2.0	Single Age
12WPY28_78	132.30	1.25	1.56300	0.02600	0.15830	0.00350	0.33204	955.0	10.0	947.0	20.0	966	28	947.0	20.0	0.8	Single Age
12WPY28_79	72.90	1.15	12.18000	0.27000	0.49300	0.01300	0.87730	2615.0	21.0	2580.0	58.0	2633	16	2633.0	16.0	2.0	Single Age
12WPY28_80	179.70	0.69	1.69100	0.03000	0.17030	0.00310	0.48334	1005.0	11.0	1016.0	17.0	969	23	1016.0	17.0	1.1	Single Age
12WPY28_81	1095.00	1.08	5.81000	0.14000	0.22930	0.00580	0.65393	1955.0	21.0	1330.0	30.0	2707	17	DISC	DISC	50.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_82	115.70	0.71	0.48500	0.02700	0.04760	0.00270	0.45281	401.0	19.0	299.0	17.0	981	59	DISC	DISC	25.4	Rim
12WPY28_82	54.50	1.10	0.86300	0.02900	0.10280	0.00300	0.47612	630.0	16.0	630.0	17.0	694	38	630.0	17.0	0.0	Core
12WPY28_83	101.00	3.00	0.88000	0.02400	0.10420	0.00220	0.59798	639.0	13.0	639.0	13.0	643	24	639.0	13.0	0.0	Single Age
12WPY28_84	805.00	1.77	0.86300	0.01500	0.10140	0.00170	0.64055	631.1	8.3	622.4	9.7	662	16	622.4	9.7	1.4	Single Age
12WPY28_85	267.90	0.76	0.73700	0.01600	0.09180	0.00180	0.64135	559.6	9.3	566.0	10.0	562	24	566.0	10.0	1.1	Single Age
12WPY28_86	89.90	0.81	1.74500	0.03300	0.17420	0.00390	0.55113	1024.0	12.0	1035.0	21.0	971	22	1035.0	21.0	1.1	Single Age
12WPY28_87	193.00	0.54	12.37000	0.23000	0.46700	0.01100	0.58371	2630.0	18.0	2469.0	49.0	2750	19	2750.0	19.0	10.2	Single Age
12WPY28_88	106.30	1.56	1.68300	0.03600	0.16590	0.00320	0.48900	1001.0	13.0	989.0	18.0	1046	23	989.0	18.0	1.2	Single Age
12WPY28_89	475.00	1.79	0.96500	0.01700	0.11090	0.00230	0.51722	685.2	8.7	677.0	13.0	713	24	677.0	13.0	1.2	Single Age
12WPY28_90	234.00	1.31	0.87600	0.01600	0.10490	0.00260	0.52669	639.4	8.5	643.0	15.0	647	28	643.0	15.0	0.6	Single Age
12WPY28_91	146.00	1.04	0.92700	0.04000	0.10810	0.00510	0.79099	665.0	21.0	668.0	28.0	722	48	668.0	28.0	0.5	Rim
12WPY28_91	68.80	0.49	1.18800	0.02500	0.12860	0.00290	0.15198	794.0	12.0	779.0	16.0	828	35	779.0	16.0	1.9	Core
12WPY28_92	240.00	1.00	0.66200	0.03100	0.08130	0.00330	0.52927	515.0	19.0	504.0	20.0	593	38	504.0	20.0	2.1	Rim
12WPY28_92	162.80	1.79	1.05600	0.03900	0.11700	0.00570	0.62169	731.0	19.0	713.0	33.0	800	55	713.0	33.0	2.5	Core
12WPY28_93	323.00	1.25	0.79800	0.01200	0.09510	0.00180	0.51268	595.5	6.6	586.0	11.0	648	22	586.0	11.0	1.6	Single Age
12WPY28_94	394.00	1.83	0.93600	0.02900	0.10570	0.00350	0.53652	670.0	15.0	648.0	20.0	706	30	648.0	20.0	3.3	Single Age
12WPY28_95	356.00	30.50	0.80900	0.01400	0.09500	0.00200	0.63547	601.4	7.7	585.0	12.0	677	19	585.0	12.0	2.7	Single Age
12WPY28_96	36.00	1.32	0.89300	0.02700	0.10200	0.00290	0.43895	649.0	15.0	626.0	17.0	713	44	626.0	17.0	3.5	Single Age
12WPY28_97	159.70	1.43	1.63600	0.03600	0.16190	0.00460	0.50512	983.0	14.0	970.0	26.0	1014	31	970.0	26.0	1.3	Single Age
12WPY28_98	484.00	1.99	0.63200	0.03500	0.07630	0.00370	0.26656	497.0	22.0	474.0	22.0	625	57	474.0	22.0	4.6	Rim
12WPY28_98	263.60	0.76	0.78200	0.01600	0.09330	0.00240	0.69278	586.3	8.9	575.0	14.0	638	22	575.0	14.0	1.9	Core
12WPY28_99	504.00	1.83	0.74700	0.01200	0.09270	0.00160	0.59404	566.2	6.8	571.2	9.5	560	22	571.2	9.5	0.9	Single Age
12WPY28_100	91.50	0.57	4.74300	0.08700	0.31190	0.00720	0.58575	1775.0	16.0	1758.0	35.0	1803	21	1803.0	21.0	2.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_101	102.00	0.53	1.61800	0.02500	0.16240	0.00290	0.28834	976.3	9.9	970.0	16.0	983	25	970.0	16.0	0.6	Single Age
12WPY28_102	14.09	1.00	1.30600	0.04600	0.12860	0.00340	0.25833	850.0	21.0	779.0	20.0	1044	41	779.0	20.0	8.4	Single Age
12WPY28_103	288.80	2.18	0.32900	0.01100	0.04600	0.00200	0.42051	288.9	8.7	290.0	12.0	341	49	290.0	12.0	0.4	Single Age
12WPY28_104	121.30	2.16	0.96700	0.02000	0.11300	0.00250	0.41959	688.0	10.0	690.0	14.0	700	27	690.0	14.0	0.3	Single Age
12WPY28_105	212.00	1.61	0.80100	0.03300	0.09300	0.00470	0.59781	604.0	23.0	573.0	28.0	779	46	573.0	28.0	5.1	Rim
12WPY28_105	248.00	1.88	1.04800	0.02200	0.12110	0.00300	0.48250	727.0	11.0	736.0	17.0	729	27	736.0	17.0	1.2	Core
12WPY28_106	155.00	0.93	4.87000	0.16000	0.29400	0.01100	0.75950	1795.0	28.0	1662.0	53.0	1942	33	1942.0	33.0	14.4	Single Age
12WPY28_107	504.00	50.50	12.76000	0.22000	0.50520	0.00860	0.57892	2663.0	17.0	2634.0	37.0	2690	13	2690.0	13.0	2.1	Single Age
12WPY28_108	1050.00	1.86	0.43600	0.01800	0.05040	0.00220	0.67880	369.0	12.0	317.0	13.0	771	50	DISC	DISC	14.1	Rim
12WPY28_108	86.00	0.92	1.38000	0.04700	0.14370	0.00490	0.54300	879.0	20.0	865.0	28.0	908	32	865.0	28.0	1.6	Core
12WPY28_109	984.00	22.50	0.83100	0.01900	0.10210	0.00200	0.66065	615.0	11.0	626.0	11.0	573	21	626.0	11.0	1.8	Single Age
12WPY28_110	520.00	1.18	3.45000	0.11000	0.22480	0.00780	0.90257	1514.0	25.0	1305.0	41.0	1838	14	1838.0	14.0	29.0	Single Age
12WPY28_111	335.00	0.69	0.84200	0.02400	0.09960	0.00290	0.56738	619.0	13.0	612.0	17.0	653	32	612.0	17.0	1.1	Single Age
12WPY28_112	304.00	10.69	0.71600	0.01900	0.08770	0.00230	0.56129	550.0	11.0	542.0	13.0	601	34	542.0	13.0	1.5	Rim
12WPY28_112	110.40	0.40	1.51000	0.03200	0.15090	0.00410	0.42916	934.0	13.0	911.0	25.0	997	34	911.0	25.0	2.5	Core
12WPY28_113	595.00	2.67	1.11600	0.02200	0.12180	0.00280	0.58026	762.0	10.0	741.0	16.0	800	23	741.0	16.0	2.8	Single Age
12WPY28_114	179.90	1.15	0.87800	0.01900	0.10560	0.00210	0.57168	640.0	10.0	647.0	12.0	637	22	647.0	12.0	1.1	Single Age
12WPY28_115	261.00	1.18	0.67300	0.01300	0.08570	0.00150	0.54720	523.1	8.0	529.7	8.7	481	20	529.7	8.7	1.3	Single Age
12WPY28_116	200.30	1.88	0.75400	0.01600	0.09370	0.00230	0.43104	570.1	9.4	577.0	14.0	538	33	577.0	14.0	1.2	Single Age
12WPY28_117	1084.00	3.74	0.98700	0.02800	0.11030	0.00300	0.81549	697.0	14.0	674.0	18.0	783	20	674.0	18.0	3.3	Single Age
12WPY28_118	166.60	0.74	1.12900	0.02300	0.12350	0.00240	0.39730	766.0	11.0	752.0	14.0	833	25	752.0	14.0	1.8	Single Age
12WPY28_119	177.00	0.72	11.16000	0.22000	0.46200	0.01100	0.81128	2534.0	19.0	2451.0	47.0	2607	11	2607.0	11.0	6.0	Single Age
12WPY28_120	356.00	7.57	0.58410	0.00990	0.07420	0.00130	0.61683	466.7	6.3	462.1	7.8	485	22	462.1	7.8	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY28_121	258.00	0.93	1.50500	0.02500	0.15740	0.00320	0.53697	934.1	9.7	942.0	18.0	920	19	942.0	18.0	0.8	Single Age
12WPY28_122	222.80	1.20	0.92500	0.01700	0.10960	0.00220	0.55587	665.7	8.6	670.0	13.0	641	19	670.0	13.0	0.6	Single Age
12WPY28_123	160.30	1.42	0.60700	0.01200	0.07690	0.00180	0.43756	481.1	7.3	477.0	11.0	500	32	477.0	11.0	0.9	Single Age
12WPY28_124	71.50	0.92	0.25200	0.03700	0.03460	0.00230	0.10718	228.0	30.0	219.0	14.0	580	300	219.0	14.0	3.9	Rim
12WPY28_124	126.90	1.75	0.72500	0.03800	0.08480	0.00340	0.56266	555.0	22.0	524.0	20.0	672	38	524.0	20.0	5.6	Core
12WPY30_1	134.00	0.64	6.58000	0.14000	0.37230	0.00910	0.60947	2054.0	18.0	2038.0	43.0	2060	20	2060.0	20.0	1.1	Single Age
12WPY30_2	574.00	15.90	0.83500	0.02000	0.10120	0.00280	0.63211	620.0	12.0	621.0	16.0	627	29	621.0	16.0	0.2	Single Age
12WPY30_4	81.40	1.10	8.64000	0.24000	0.36500	0.01500	0.77873	2302.0	24.0	2005.0	68.0	2570	20	2570.0	20.0	22.0	Single Age
12WPY30_5	194.00	0.80	5.16100	0.09100	0.32750	0.00670	0.69629	1845.0	15.0	1825.0	33.0	1869	15	1869.0	15.0	2.4	Single Age
12WPY30_6	223.00	3.66	5.88000	0.17000	0.35600	0.00970	0.90607	1952.0	26.0	1960.0	47.0	1954	17	1954.0	17.0	0.3	Single Age
12WPY30_7	503.00	1.08	1.88200	0.03900	0.18340	0.00440	0.61876	1074.0	14.0	1085.0	24.0	1073	24	1085.0	24.0	1.0	Single Age
12WPY30_8	139.50	0.97	10.17000	0.18000	0.45800	0.01200	0.72440	2452.0	17.0	2432.0	50.0	2478	19	2478.0	19.0	1.9	Single Age
12WPY30_9	97.00	0.68	0.62200	0.01600	0.07880	0.00140	0.13211	490.3	9.8	488.7	8.5	477	34	488.7	8.5	0.3	Single Age
12WPY30_10	241.00	1.66	0.72300	0.01500	0.08670	0.00190	0.40767	551.8	8.9	536.0	11.0	651	30	536.0	11.0	2.9	Single Age
12WPY30_11	193.90	0.72	1.13700	0.02300	0.12460	0.00220	0.57957	773.0	12.0	757.0	12.0	821	22	757.0	12.0	2.1	Single Age
12WPY30_13	132.40	0.72	12.11000	0.18000	0.49000	0.01000	0.78858	2611.0	14.0	2573.0	42.0	2648	11	2648.0	11.0	2.8	Single Age
12WPY30_14	208.00	4.49	0.51400	0.03000	0.06010	0.00230	0.71536	421.0	20.0	376.0	14.0	615	48	DISC	DISC	10.7	Rim
12WPY30_14	977.00	36.70	0.74600	0.01700	0.09310	0.00260	0.68436	566.8	9.8	573.0	15.0	541	29	573.0	15.0	1.1	Core
12WPY30_15	246.00	3.01	0.90800	0.01600	0.10880	0.00220	0.61025	656.2	8.1	666.0	13.0	608	20	666.0	13.0	1.5	Single Age
12WPY30_16	465.00	1.52	0.77900	0.01800	0.09250	0.00280	0.59817	586.0	11.0	570.0	17.0	648	27	570.0	17.0	2.7	Single Age
12WPY30_17	574.00	1.55	0.77900	0.01700	0.09390	0.00250	0.20612	584.0	10.0	578.0	15.0	626	35	578.0	15.0	1.0	Single Age
12WPY30_19	146.60	0.63	6.60000	0.11000	0.38100	0.00660	0.78217	2059.0	15.0	2080.0	31.0	2043	14	2043.0	14.0	1.8	Single Age
12WPY30_20	544.00	3.70	0.99400	0.06500	0.11560	0.00660	0.91914	700.0	33.0	705.0	38.0	660	34	705.0	38.0	0.7	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY30_20	155.10	0.39	1.65600	0.02900	0.16880	0.00350	0.58786	991.0	11.0	1005.0	19.0	992	18	1005.0	19.0	1.4	Core
12WPY30_21	122.00	0.68	0.88500	0.02000	0.10610	0.00260	0.51070	645.0	10.0	650.0	15.0	603	26	650.0	15.0	0.8	Single Age
12WPY30_22	132.00	0.58	1.10300	0.03300	0.12390	0.00350	0.68392	753.0	16.0	752.0	20.0	779	30	752.0	20.0	0.1	Single Age
12WPY30_23	77.80	1.67	0.89600	0.02400	0.10490	0.00210	0.50466	648.0	13.0	643.0	12.0	642	27	643.0	12.0	0.8	Single Age
12WPY30_24	118.50	0.82	1.52000	0.02400	0.15580	0.00270	0.44015	937.5	9.8	935.0	16.0	947	20	935.0	16.0	0.3	Single Age
12WPY30_25	182.00	5.30	0.97100	0.07900	0.11500	0.00610	0.70787	686.0	40.0	702.0	35.0	605	43	702.0	35.0	2.3	Rim
12WPY30_25	154.00	3.79	4.53000	0.24000	0.22110	0.00650	0.73722	1736.0	44.0	1286.0	34.0	2346	52	DISC	DISC	45.2	Core
12WPY30_26	158.80	1.23	0.84700	0.01800	0.10190	0.00180	0.46166	623.3	9.6	626.0	10.0	599	27	626.0	10.0	0.4	Single Age
12WPY30_27	874.00	10.40	0.72800	0.01100	0.08880	0.00180	0.68605	555.1	6.4	550.0	11.0	571	20	550.0	11.0	0.9	Single Age
12WPY30_28	185.00	0.65	0.75700	0.02000	0.09310	0.00280	0.59140	571.0	12.0	574.0	17.0	573	28	574.0	17.0	0.5	Single Age
12WPY30_29	784.00	5.39	5.08000	0.11000	0.32630	0.00720	0.68085	1834.0	18.0	1819.0	35.0	1855	17	1855.0	17.0	1.9	Single Age
12WPY30_30	47.10	0.57	9.33000	0.29000	0.40600	0.01500	0.84873	2375.0	29.0	2189.0	70.0	2540	19	2540.0	19.0	13.8	Single Age
12WPY30_31	268.00	0.37	1.23700	0.02100	0.13190	0.00230	0.53831	818.1	9.7	799.0	13.0	864	24	799.0	13.0	2.3	Single Age
12WPY30_32	196.00	12.40	0.90000	0.06500	0.10760	0.00930	0.78510	650.0	34.0	658.0	54.0	714	68	658.0	54.0	1.2	Rim
12WPY30_32	77.90	0.56	1.74800	0.05700	0.17380	0.00460	0.51566	1024.0	21.0	1033.0	25.0	1040	34	1033.0	25.0	0.9	Core
12WPY30_33	194.00	2.67	0.87400	0.02400	0.10240	0.00250	0.38315	637.0	13.0	628.0	15.0	648	39	628.0	15.0	1.4	Single Age
12WPY30_34	81.30	0.46	0.83000	0.02100	0.10100	0.00260	0.53014	612.0	12.0	622.0	16.0	589	30	622.0	16.0	1.6	Single Age
12WPY30_35	250.00	0.87	12.18000	0.23000	0.48900	0.01200	0.73802	2617.0	18.0	2562.0	53.0	2649	15	2649.0	15.0	3.3	Single Age
12WPY30_36	602.00	1.21	1.28100	0.04600	0.13250	0.00410	0.66872	836.0	20.0	802.0	23.0	914	31	802.0	23.0	4.1	Rim
12WPY30_36	191.00	0.79	1.52000	0.06600	0.15370	0.00670	0.70118	937.0	27.0	922.0	38.0	997	19	922.0	38.0	1.6	Core
12WPY30_37	816.00	3.17	1.00800	0.01600	0.11520	0.00230	0.64486	707.3	8.2	703.0	14.0	728	21	703.0	14.0	0.6	Single Age
12WPY30_38	72.80	2.44	1.40700	0.03000	0.14660	0.00310	0.58756	894.0	13.0	882.0	17.0	962	26	882.0	17.0	1.3	Single Age
12WPY30_39	198.00	1.34	9.40000	0.26000	0.43500	0.01100	0.71676	2373.0	25.0	2335.0	49.0	2418	22	2418.0	22.0	3.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY30_40	200.60	1.46	0.67900	0.01300	0.08530	0.00190	0.55944	527.1	7.8	527.0	11.0	518	25	527.0	11.0	0.0	Single Age
12WPY30_41	241.00	0.61	0.72500	0.01400	0.09030	0.00180	0.72029	552.8	8.4	557.0	11.0	542	20	557.0	11.0	0.8	Single Age
12WPY30_42	86.00	0.85	10.22000	0.14000	0.46030	0.00870	0.56691	2455.0	13.0	2443.0	39.0	2475	13	2475.0	13.0	1.3	Single Age
12WPY30_43	36.80	0.67	0.93700	0.02300	0.11160	0.00290	0.42107	670.0	12.0	682.0	17.0	651	41	682.0	17.0	1.8	Single Age
12WPY30_44	120.10	0.27	0.65400	0.01600	0.08090	0.00190	0.51233	509.9	9.7	501.0	11.0	544	30	501.0	11.0	1.7	Single Age
12WPY30_45	282.00	2.33	0.80500	0.01600	0.09750	0.00220	0.56781	599.0	9.2	599.0	13.0	593	27	599.0	13.0	0.0	Single Age
12WPY30_46	516.00	11.90	0.68600	0.02700	0.08120	0.00310	0.53955	530.0	16.0	503.0	19.0	661	59	503.0	19.0	5.1	Rim
12WPY30_46	448.00	2.45	1.26000	0.03100	0.12870	0.00400	0.62947	830.0	13.0	780.0	23.0	945	31	780.0	23.0	6.0	Core
12WPY30_47	145.00	0.65	0.88400	0.01700	0.10490	0.00220	0.56281	643.8	9.7	643.0	13.0	649	27	643.0	13.0	0.1	Single Age
12WPY30_48	160.10	2.78	0.70400	0.01300	0.08790	0.00190	0.57454	540.5	7.6	543.0	11.0	544	20	543.0	11.0	0.5	Single Age
12WPY30_50	171.00	1.31	0.95900	0.01700	0.11160	0.00230	0.54440	682.0	8.9	682.0	13.0	681	25	682.0	13.0	0.0	Single Age
12WPY30_51	380.00	3.42	0.87000	0.01400	0.10310	0.00200	0.49393	636.3	7.3	632.0	12.0	644	19	632.0	12.0	0.7	Single Age
12WPY30_52	135.30	0.55	1.84800	0.04700	0.18010	0.00410	0.63193	1063.0	16.0	1067.0	23.0	1071	29	1067.0	23.0	0.4	Single Age
12WPY30_53	35.00	1.43	0.91800	0.02500	0.10880	0.00320	0.40276	661.0	13.0	665.0	18.0	638	39	665.0	18.0	0.6	Single Age
12WPY30_54	201.20	3.65	0.85500	0.03200	0.09880	0.00350	0.54889	627.0	17.0	607.0	20.0	697	49	607.0	20.0	3.2	Rim
12WPY30_54	202.10	3.60	1.22900	0.04100	0.13070	0.00510	0.75550	813.0	19.0	791.0	29.0	849	46	791.0	29.0	2.7	Core
12WPY30_55	550.00	3.51	0.65700	0.04700	0.07940	0.00610	0.88189	512.0	29.0	492.0	36.0	661	35	492.0	36.0	3.9	Rim
12WPY30_55	60.30	1.95	1.58800	0.05500	0.16570	0.00520	0.60736	962.0	22.0	987.0	29.0	922	42	987.0	29.0	2.6	Core
12WPY30_56	263.00	1.18	1.19700	0.02800	0.13460	0.00340	0.67344	798.0	13.0	814.0	19.0	749	28	814.0	19.0	2.0	Single Age
12WPY30_57	343.00	2.17	1.62900	0.03700	0.16120	0.00370	0.51079	980.0	14.0	963.0	20.0	1014	22	963.0	20.0	1.7	Rim
12WPY30_57	359.30	4.29	5.95000	0.24000	0.33000	0.01300	0.72803	1965.0	35.0	1836.0	62.0	2123	28	2123.0	28.0	13.5	Core
12WPY30_58	1390.00	2.63	0.38300	0.02700	0.04500	0.00260	0.68687	328.0	20.0	284.0	16.0	642	36	DISC	DISC	13.4	Rim
12WPY30_58	447.00	0.49	0.76700	0.01900	0.08730	0.00210	0.65499	578.0	11.0	539.0	13.0	646	25	539.0	13.0	6.7	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY30_59	1003.00	14.10	0.88700	0.02400	0.10470	0.00310	0.74819	645.0	13.0	642.0	18.0	670	23	642.0	18.0	0.5	Rim
12WPY30_59	371.00	1.86	11.28000	0.40000	0.45100	0.01800	0.69879	2543.0	34.0	2398.0	78.0	2652	30	2652.0	30.0	9.6	Core
12WPY30_60	350.00	4.05	2.21000	0.11000	0.14380	0.00440	0.63186	1180.0	34.0	866.0	25.0	1803	57	DISC	DISC	26.6	Rim
12WPY30_60	149.70	2.69	5.50000	0.19000	0.23130	0.00780	0.80576	1903.0	31.0	1348.0	40.0	2577	18	DISC	DISC	47.7	Core
12WPY30_61	62.70	0.95	1.01900	0.02200	0.11540	0.00260	0.34093	714.0	11.0	704.0	15.0	746	27	704.0	15.0	1.4	Single Age
12WPY30_62	171.00	0.86	0.90700	0.01600	0.10720	0.00200	0.49897	654.7	8.7	656.0	12.0	619	19	656.0	12.0	0.2	Single Age
12WPY30_63	573.00	3.63	11.57000	0.19000	0.50200	0.01100	0.77118	2570.0	16.0	2626.0	47.0	2534	14	2534.0	14.0	3.6	Single Age
12WPY30_64	352.00	1.49	14.00000	0.23000	0.52390	0.00950	0.84581	2749.0	16.0	2719.0	41.0	2764	11	2764.0	11.0	1.6	Single Age
12WPY30_65	135.00	3.87	0.73900	0.01300	0.09130	0.00160	0.22874	561.4	7.7	563.3	9.6	590	29	563.3	9.6	0.3	Single Age
12WPY30_66	505.00	5.15	0.36000	0.00730	0.04910	0.00110	0.51793	311.9	5.4	308.9	6.7	366	28	308.9	6.7	1.0	Single Age
12WPY30_67	403.40	13.00	0.80500	0.01600	0.09420	0.00160	0.49884	599.1	8.8	581.3	9.6	679	28	581.3	9.6	3.0	Single Age
12WPY30_68	153.80	0.31	8.42000	0.14000	0.39260	0.00760	0.60209	2279.0	16.0	2134.0	35.0	2404	16	2404.0	16.0	11.2	Single Age
12WPY30_69	957.00	1.54	0.78400	0.01300	0.09240	0.00200	0.58540	587.4	7.7	570.0	12.0	640	28	570.0	12.0	3.0	Single Age
12WPY30_70	344.70	1.71	1.01600	0.01700	0.11520	0.00200	0.59322	712.3	8.5	703.0	12.0	745	17	703.0	12.0	1.3	Single Age
12WPY30_71	180.00	3.08	1.22700	0.03500	0.13000	0.00280	0.60445	812.0	16.0	789.0	16.0	872	39	789.0	16.0	2.8	Single Age
12WPY30_72	820.00	1.48	0.71700	0.01200	0.08920	0.00190	0.50006	548.7	6.9	553.0	12.0	545	28	553.0	12.0	0.8	Single Age
12WPY30_73	153.40	1.03	1.82400	0.03100	0.17560	0.00350	0.58258	1053.0	11.0	1042.0	19.0	1071	20	1042.0	19.0	1.0	Single Age
12WPY30_74	174.40	1.49	0.64400	0.01800	0.07430	0.00230	0.53090	507.0	12.0	462.0	14.0	593	30	462.0	14.0	8.9	Single Age
12WPY30_75	297.00	0.77	1.66200	0.03500	0.16430	0.00420	0.68479	993.0	13.0	980.0	23.0	1017	23	980.0	23.0	1.3	Single Age
12WPY30_76	761.00	1.33	8.04000	0.17000	0.31960	0.00800	0.75484	2232.0	20.0	1786.0	39.0	2556	14	DISC	DISC	30.1	Single Age
12WPY30_77	322.70	1.52	0.90500	0.02200	0.10670	0.00280	0.53803	653.0	12.0	654.0	16.0	670	19	654.0	16.0	0.2	Single Age
12WPY30_78	226.90	0.82	3.78300	0.08900	0.23770	0.00670	0.75812	1591.0	20.0	1373.0	35.0	1885	26	1885.0	26.0	27.2	Single Age
12WPY30_80	804.00	0.68	1.59100	0.03000	0.16020	0.00420	0.36786	967.0	11.0	957.0	23.0	1005	21	957.0	23.0	1.0	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY30_81	178.00	1.81	0.72700	0.02000	0.08850	0.00260	0.68478	554.0	12.0	546.0	15.0	574	24	546.0	15.0	1.4	Single Age
12WPY30_82	207.00	0.66	5.97000	0.08500	0.35570	0.00590	0.64337	1972.0	13.0	1960.0	28.0	1989	13	1989.0	13.0	1.5	Single Age
12WPY30_83	46.80	1.02	1.59400	0.03300	0.16110	0.00330	0.24951	970.0	13.0	962.0	18.0	999	30	962.0	18.0	0.8	Single Age
12WPY30_84	516.00	4.21	0.99300	0.01600	0.11390	0.00170	0.47110	701.9	8.0	695.3	9.7	715	19	695.3	9.7	0.9	Single Age
12WPY30_85	153.80	1.34	10.60000	0.19000	0.44930	0.00800	0.62625	2486.0	17.0	2391.0	36.0	2565	14	2565.0	14.0	6.8	Single Age
12WPY30_86	501.00	1.15	0.55500	0.02900	0.06360	0.00360	0.87273	448.0	19.0	397.0	22.0	613	25	DISC	DISC	11.4	Single Age
12WPY30_87	147.00	1.51	1.83100	0.03000	0.17810	0.00420	0.48408	1056.0	11.0	1059.0	22.0	1047	25	1059.0	22.0	0.3	Single Age
12WPY30_88	464.00	2.00	3.78600	0.05900	0.22440	0.00480	0.72523	1590.0	12.0	1304.0	25.0	1942	15	DISC	DISC	32.9	Single Age
12WPY30_89	151.00	0.67	1.56700	0.03800	0.15470	0.00340	0.51765	955.0	15.0	927.0	19.0	1048	24	927.0	19.0	2.9	Single Age
12WPY30_90	334.00	0.98	1.17500	0.02000	0.12960	0.00240	0.32603	789.4	9.8	785.0	14.0	800	22	785.0	14.0	0.6	Single Age
12WPY30_91	246.00	0.94	0.81000	0.01600	0.09650	0.00200	0.42863	601.6	8.8	594.0	12.0	638	24	594.0	12.0	1.3	Single Age
12WPY30_92	83.00	1.90	1.40000	0.03200	0.14930	0.00310	0.57626	889.0	14.0	896.0	17.0	871	28	896.0	17.0	0.8	Single Age
12WPY30_93	414.00	0.59	5.05000	0.11000	0.32390	0.00810	0.72729	1830.0	18.0	1813.0	39.0	1863	22	1863.0	22.0	2.7	Single Age
12WPY30_94	232.00	1.69	0.83200	0.04000	0.10030	0.00450	0.76169	618.0	21.0	616.0	26.0	646	31	616.0	26.0	0.3	Single Age
12WPY30_95	263.00	8.89	0.95200	0.01700	0.11200	0.00260	0.57165	678.8	8.6	684.0	15.0	656	19	684.0	15.0	0.8	Single Age
12WPY30_96	371.00	0.82	1.70700	0.03100	0.17020	0.00380	0.74744	1010.0	12.0	1013.0	21.0	1015	15	1013.0	21.0	0.3	Single Age
12WPY30_97	42.00	0.65	7.43000	0.13000	0.39980	0.00890	0.58352	2166.0	16.0	2171.0	42.0	2162	16	2162.0	16.0	0.4	Single Age
12WPY30_98	441.00	1.24	0.68200	0.01200	0.08420	0.00180	0.55216	528.0	7.3	521.0	11.0	555	25	521.0	11.0	1.3	Single Age
12WPY30_99	440.00	1.51	4.99000	0.13000	0.31550	0.00770	0.77033	1814.0	23.0	1766.0	38.0	1867	17	1867.0	17.0	5.4	Single Age
12WPY30_100	112.30	0.66	15.38000	0.26000	0.53900	0.01200	0.59206	2837.0	16.0	2788.0	51.0	2884	17	2884.0	17.0	3.3	Single Age
12WPY30_101	473.00	9.25	1.26500	0.06000	0.12490	0.00720	0.52772	829.0	27.0	758.0	41.0	953	69	758.0	41.0	8.6	Rim
12WPY30_101	183.30	2.10	2.95600	0.09700	0.20780	0.00600	0.77146	1393.0	25.0	1222.0	31.0	1692	19	1692.0	19.0	27.8	Core
12WPY30_102	88.10	0.47	0.81400	0.02800	0.09570	0.00250	0.40309	603.0	16.0	589.0	15.0	673	44	589.0	15.0	2.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY30_104	1260.00	4.28	0.71600	0.03900	0.07970	0.00390	0.68984	556.0	19.0	494.0	23.0	753	55	DISC	DISC	11.2	Rim
12WPY30_104	90.60	0.90	1.31800	0.03900	0.13060	0.00370	0.51488	852.0	17.0	791.0	21.0	1018	31	791.0	21.0	7.2	Core
12WPY30_105	131.00	1.39	1.66700	0.03500	0.16480	0.00400	0.66563	994.0	13.0	986.0	23.0	1011	26	986.0	23.0	0.8	Single Age
12WPY30_106	15.22	0.27	0.95400	0.04900	0.10450	0.00370	0.07508	679.0	25.0	640.0	22.0	808	71	640.0	22.0	5.7	Single Age
12WPY30_107	263.00	1.17	1.47600	0.02800	0.15140	0.00270	0.62961	921.0	12.0	908.0	15.0	938	19	908.0	15.0	1.4	Single Age
12WPY30_108	49.40	1.05	1.02600	0.02400	0.11930	0.00340	0.44844	716.0	12.0	726.0	19.0	729	38	726.0	19.0	1.4	Single Age
12WPY30_109	325.00	0.88	5.97100	0.09600	0.35350	0.00710	0.70284	1970.0	14.0	1949.0	34.0	1997	17	1997.0	17.0	2.4	Single Age
12WPY30_110	268.00	2.27	0.65900	0.01300	0.08110	0.00160	0.51271	514.6	7.8	502.7	9.5	563	25	502.7	9.5	2.3	Single Age
12WPY30_111	331.00	1.13	9.10000	0.16000	0.35260	0.00870	0.63985	2349.0	17.0	1946.0	41.0	2619	17	2619.0	17.0	25.7	Single Age
12WPY30_112	164.00	2.21	0.62700	0.01600	0.07830	0.00130	0.17035	495.3	9.4	486.0	7.9	524	28	486.0	7.9	1.9	Single Age
12WPY30_113	92.80	1.19	1.69100	0.04100	0.17080	0.00370	0.59965	1003.0	15.0	1016.0	20.0	1000	23	1016.0	20.0	1.3	Single Age
12WPY30_114	123.00	0.61	1.86100	0.04500	0.18010	0.00430	0.60583	1070.0	16.0	1067.0	23.0	1071	27	1067.0	23.0	0.3	Single Age
12WPY30_115	260.00	1.49	1.37800	0.02700	0.14350	0.00300	0.37237	881.0	11.0	864.0	17.0	912	27	864.0	17.0	1.9	Single Age
12WPY30_116	176.00	0.68	1.66800	0.02800	0.16920	0.00310	0.58666	995.0	11.0	1007.0	17.0	974	21	1007.0	17.0	1.2	Single Age
12WPY30_117	777.00	2.85	0.76900	0.01100	0.09490	0.00150	0.56207	578.8	6.5	584.2	8.6	561	15	584.2	8.6	0.9	Single Age
12WPY30_118	425.70	1.21	12.76000	0.29000	0.51300	0.01100	0.73179	2660.0	22.0	2667.0	46.0	2649	15	2649.0	15.0	0.7	Single Age
12WPY30_119	523.00	1.74	0.40590	0.00530	0.05503	0.00097	0.50796	346.4	3.7	345.3	5.9	373	24	345.3	5.9	0.3	Single Age
12WPY30_120	19.79	1.44	0.97400	0.03800	0.11090	0.00310	0.32424	689.0	19.0	677.0	18.0	720	44	677.0	18.0	1.7	Single Age
12WPY30_121	83.90	0.72	5.07900	0.09800	0.29240	0.00690	0.73385	1832.0	16.0	1652.0	35.0	2040	17	2040.0	17.0	19.0	Single Age
12WPY49_1	551.00	4.41	0.80420	0.00730	0.09533	0.00077	0.61788	599.0	4.1	587.0	4.5	643	16	587.0	4.5	2.0	Single Age
12WPY49_2	144.00	0.84	0.74600	0.01500	0.08980	0.00130	0.69718	566.1	9.1	554.4	7.9	641	33	554.4	7.9	2.1	Single Age
12WPY49_3	935.00	1.46	0.38940	0.00300	0.05295	0.00035	0.35713	334.1	2.1	332.6	2.1	354	18	332.6	2.1	0.4	Single Age
12WPY49_4	269.00	4.74	1.11900	0.01300	0.12560	0.00140	0.46162	762.0	6.3	762.6	7.8	766	21	762.6	7.8	0.1	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY49_5	304.00	4.48	0.61900	0.01700	0.07950	0.00170	0.89994	488.0	11.0	493.0	10.0	522	26	493.0	10.0	1.0	Single Age
12WPY49_7	385.00	3.34	0.64100	0.01700	0.08000	0.00180	0.66523	502.0	11.0	496.0	11.0	524	34	496.0	11.0	1.2	Single Age
12WPY49_8	412.00	5.00	0.45800	0.02600	0.06100	0.00310	0.85606	383.0	18.0	382.0	19.0	391	63	382.0	19.0	0.3	Rim
12WPY49_8	81.00	0.97	0.72000	0.01300	0.08723	0.00099	0.29908	551.2	7.8	539.1	5.9	604	37	539.1	5.9	2.2	Core
12WPY49_9	287.00	28.80	0.44800	0.01600	0.06050	0.00490	0.69331	376.0	11.0	378.0	30.0	432	65	378.0	30.0	0.5	Rim
12WPY49_9	169.00	1.57	0.60140	0.00860	0.07713	0.00098	0.46941	477.8	5.4	478.9	5.9	497	28	478.9	5.9	0.2	Core
12WPY49_10	233.20	4.40	0.57830	0.00640	0.07371	0.00061	0.35707	463.2	4.1	458.5	3.7	494	26	458.5	3.7	1.0	Single Age
12WPY49_11	178.00	1.59	1.65600	0.02000	0.16710	0.00220	0.89021	991.4	7.6	996.0	12.0	990	17	996.0	12.0	0.5	Single Age
12WPY49_12	135.10	0.84	0.71600	0.02000	0.08720	0.00150	0.66636	549.0	12.0	539.0	8.7	621	48	539.0	8.7	1.8	Single Age
12WPY49_13	597.00	6.00	0.47900	0.01600	0.06020	0.00190	0.75543	397.0	11.0	377.0	12.0	517	64	377.0	12.0	5.0	Rim
12WPY49_13	228.70	1.04	0.80770	0.00980	0.09761	0.00082	0.34453	601.0	5.5	600.4	4.8	602	28	600.4	4.8	0.1	Core
12WPY49_14	396.00	2.22	6.58000	0.28000	0.30200	0.01000	0.98182	2058.0	37.0	1700.0	51.0	2422	17	2422.0	17.0	29.8	Single Age
12WPY49_15	172.00	10.70	0.84500	0.01200	0.09860	0.00130	0.67429	621.5	6.3	606.0	7.5	674	25	606.0	7.5	2.5	Single Age
12WPY49_16	61.60	1.19	1.41800	0.03500	0.14200	0.00360	0.35778	896.0	15.0	856.0	20.0	970	57	856.0	20.0	4.5	Single Age
12WPY49_17	1608.00	25.50	0.40100	0.02600	0.05320	0.00280	0.54753	342.0	19.0	334.0	17.0	400	120	334.0	17.0	2.3	Rim
12WPY49_17	426.00	2.28	1.10100	0.02400	0.11700	0.00250	0.76526	754.0	12.0	713.0	15.0	881	35	713.0	15.0	5.4	Rim
12WPY49_17	171.00	1.81	1.59500	0.03100	0.16100	0.00230	0.77064	968.0	12.0	963.0	13.0	983	31	963.0	13.0	0.5	Core
12WPY49_18	253.00	4.46	0.82300	0.01000	0.09950	0.00110	0.55402	609.2	5.5	611.6	6.4	610	24	611.6	6.4	0.4	Single Age
12WPY49_19	87.70	0.50	1.69800	0.01900	0.16850	0.00160	0.50956	1007.2	7.0	1003.5	8.8	1021	18	1003.5	8.8	0.4	Single Age
12WPY49_20	37.80	0.97	0.44900	0.01600	0.05860	0.00130	0.18579	376.0	11.0	366.8	8.2	413	77	366.8	8.2	2.4	Single Age
12WPY49_21	179.00	3.06	0.56460	0.00650	0.07304	0.00070	0.28390	454.3	4.3	454.4	4.2	460	31	454.4	4.2	0.0	Single Age
12WPY49_22	204.00	1.79	0.93800	0.01100	0.10790	0.00099	0.56275	671.5	5.6	660.5	5.7	698	24	660.5	5.7	1.6	Single Age
12WPY49_23	292.00	6.25	1.13700	0.01300	0.12770	0.00130	0.80277	771.7	6.4	774.6	7.2	771	18	774.6	7.2	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY49_24	188.00	2.04	0.58090	0.00890	0.07203	0.00077	0.41731	464.7	5.7	448.3	4.7	556	31	448.3	4.7	3.5	Single Age
12WPY49_25	482.00	64.00	0.33250	0.00750	0.04599	0.00058	0.45968	291.3	5.7	289.8	3.6	315	42	289.8	3.6	0.5	Rim
12WPY49_25	58.70	1.22	0.51200	0.01700	0.06510	0.00200	0.44029	420.0	11.0	406.0	12.0	494	65	406.0	12.0	3.3	Core
12WPY49_26	2860.00	44.60	0.36160	0.00920	0.04900	0.00140	0.91206	313.4	6.9	308.4	8.6	351	36	308.4	8.6	1.6	Rim
12WPY49_26	164.00	4.19	0.58440	0.00720	0.07421	0.00073	0.38547	467.1	4.6	461.4	4.4	473	28	461.4	4.4	1.2	Core
12WPY49_27	160.50	2.63	1.37600	0.01200	0.14530	0.00130	0.28476	878.7	5.2	874.3	7.1	891	21	874.3	7.1	0.5	Single Age
12WPY49_28	27.67	1.41	1.26700	0.02600	0.13360	0.00220	0.23155	830.0	12.0	808.0	13.0	877	44	808.0	13.0	2.7	Single Age
12WPY49_29	140.00	4.90	0.44300	0.01600	0.05490	0.00110	0.57191	374.0	11.0	345.3	6.8	552	62	345.3	6.8	7.7	Single Age
12WPY49_30	1460.00	46.90	0.55800	0.00890	0.06850	0.00120	0.82505	450.6	5.7	426.9	7.5	561	24	426.9	7.5	5.3	Single Age
12WPY49_31	1339.00	31.10	0.69400	0.02600	0.08320	0.00240	0.56071	535.0	15.0	515.0	14.0	613	67	515.0	14.0	3.7	Rim
12WPY49_31	867.00	5.27	1.57100	0.01900	0.12920	0.00130	0.73723	958.5	7.6	783.3	7.3	1385	17	DISC	DISC	18.3	Core
12WPY49_32	207.00	1.13	6.37200	0.05700	0.36640	0.00330	0.74262	2027.9	7.9	2012.0	16.0	2040	12	2040.0	12.0	1.4	Single Age
12WPY49_33	1027.00	0.45	0.46300	0.01800	0.05340	0.00120	0.68228	385.0	12.0	335.5	7.1	630	46	DISC	DISC	12.9	Single Age
12WPY49_34	458.80	0.91	0.88740	0.00770	0.10550	0.00100	0.35745	645.4	4.1	646.8	5.9	644	22	646.8	5.9	0.2	Single Age
12WPY49_35	261.00	0.43	0.86000	0.01100	0.10330	0.00110	0.71164	629.9	5.7	633.9	6.4	614	18	633.9	6.4	0.6	Single Age
12WPY49_36	36.90	0.61	1.81000	0.03500	0.17580	0.00260	0.30858	1050.0	12.0	1044.0	14.0	1060	44	1044.0	14.0	0.6	Single Age
12WPY49_37	85.00	2.10	0.42500	0.01200	0.05550	0.00110	0.34356	359.3	8.7	348.1	6.7	450	65	348.1	6.7	3.1	Single Age
12WPY49_39	387.00	0.49	1.72700	0.03500	0.16150	0.00290	0.86158	1018.0	13.0	965.0	16.0	1127	24	965.0	16.0	5.2	Rim
12WPY49_39	204.90	0.25	2.21800	0.02200	0.19830	0.00230	0.69541	1186.5	7.0	1166.0	13.0	1225	22	1166.0	13.0	1.7	Core
12WPY49_40	604.00	3.46	0.62480	0.00720	0.07845	0.00084	0.43665	492.7	4.5	486.9	5.0	515	24	486.9	5.0	1.2	Single Age
12WPY49_41	64.30	0.74	4.53700	0.06800	0.29230	0.00400	0.41202	1739.0	12.0	1653.0	20.0	1839	21	1839.0	21.0	10.1	Single Age
12WPY49_42	244.00	1.40	0.89800	0.01000	0.10420	0.00100	0.45312	651.7	5.7	639.0	6.0	692	23	639.0	6.0	1.9	Single Age
12WPY49_43	900.00	7.30	0.52500	0.08800	0.06370	0.00460	0.83149	427.0	57.0	398.0	28.0	560	240	398.0	28.0	6.8	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY49_43	72.90	1.51	1.30000	0.02200	0.14120	0.00220	0.58116	844.9	9.8	851.0	12.0	835	31	851.0	12.0	0.7	Core
12WPY49_44	224.00	3.94	0.42250	0.00960	0.05450	0.00150	0.39941	357.7	6.8	341.9	8.9	420	72	341.9	8.9	4.4	Rim
12WPY49_44	136.00	0.80	0.93200	0.04800	0.10070	0.00190	0.67679	665.0	24.0	618.0	11.0	783	65	618.0	11.0	7.1	Core
12WPY49_45	69.00	4.00	0.41900	0.01400	0.05790	0.00130	0.41289	354.4	9.9	363.0	7.7	308	61	363.0	7.7	2.4	Single Age
12WPY49_46	182.90	22.70	0.93700	0.00730	0.10880	0.00077	0.31420	671.2	3.8	665.8	4.5	686	19	665.8	4.5	0.8	Single Age
12WPY49_47	391.00	50.00	0.32580	0.00440	0.04520	0.00038	0.42139	286.7	3.5	285.0	2.3	301	28	285.0	2.3	0.6	Single Age
12WPY49_48	864.00	1.41	0.31780	0.00420	0.04345	0.00053	0.60642	280.1	3.2	274.2	3.3	340	24	274.2	3.3	2.1	Single Age
12WPY49_49	188.60	5.09	0.55670	0.00780	0.07166	0.00083	0.48771	449.1	5.1	446.1	5.0	459	30	446.1	5.0	0.7	Single Age
12WPY49_50	1210.00	0.78	0.48400	0.01500	0.04644	0.00073	0.23499	400.0	10.0	292.6	4.5	1058	64	DISC	DISC	26.9	Single Age
12WPY49_51	124.00	4.23	8.55000	0.59000	0.40100	0.01300	0.96811	2254.0	64.0	2168.0	60.0	2331	70	2331.0	70.0	7.0	Single Age
12WPY49_52	239.00	3.48	0.64140	0.00590	0.08017	0.00063	0.26296	503.0	3.6	497.1	3.8	530	23	497.1	3.8	1.2	Single Age
12WPY49_53	200.00	2.20	0.78100	0.02800	0.09370	0.00270	0.93067	584.0	16.0	577.0	16.0	601	29	577.0	16.0	1.2	Single Age
12WPY49_54	268.00	7.78	0.63380	0.00680	0.07943	0.00075	0.51554	498.3	4.2	492.7	4.5	526	21	492.7	4.5	1.1	Single Age
12WPY49_55	750.00	46.00	0.33440	0.00440	0.04589	0.00058	0.47657	292.8	3.3	289.2	3.6	334	27	289.2	3.6	1.2	Single Age
12WPY49_56	520.00	1.32	0.88900	0.01900	0.09560	0.00180	0.83292	645.0	10.0	592.0	10.0	829	27	592.0	10.0	8.2	Single Age
12WPY49_57	930.00	1.06	0.33530	0.00650	0.04088	0.00079	0.60980	293.4	4.9	258.2	4.9	575	59	DISC	DISC	12.0	Single Age
12WPY49_58	139.00	0.83	0.86100	0.01300	0.10190	0.00120	0.42902	630.0	7.2	625.4	7.2	658	34	625.4	7.2	0.7	Single Age
12WPY49_59	67.30	20.60	0.92700	0.08800	0.10800	0.00440	0.46407	664.0	46.0	661.0	25.0	660	180	661.0	25.0	0.5	Rim
12WPY49_59	116.50	0.55	1.64600	0.02900	0.16230	0.00220	0.73498	987.0	11.0	969.0	12.0	1023	25	969.0	12.0	1.8	Core
12WPY49_60	398.00	0.89	0.42770	0.00430	0.05695	0.00046	0.37132	361.4	3.1	357.0	2.8	394	22	357.0	2.8	1.2	Single Age
12WPY49_61	125.20	1.46	6.69000	0.27000	0.36500	0.01500	0.99140	2057.0	40.0	2000.0	72.0	2136	10	2136.1	9.8	6.4	Single Age
12WPY49_62	715.00	1.51	0.42780	0.00940	0.05362	0.00065	0.58836	361.2	6.6	336.7	4.0	520	34	336.7	4.0	6.8	Single Age
12WPY49_63	308.00	1.09	16.07000	0.24000	0.53370	0.00950	0.86514	2882.0	15.0	2754.0	40.0	2975	14	2975.0	14.0	7.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY49_64	347.00	1.58	11.53000	0.17000	0.46220	0.00800	0.96991	2565.0	15.0	2447.0	36.0	2660	9	2660.2	8.6	8.0	Single Age
12WPY49_65	575.00	2.12	0.97200	0.01800	0.11350	0.00180	0.49102	688.8	9.5	693.0	11.0	687	38	693.0	11.0	0.6	Single Age
12WPY49_66	221.00	4.93	0.36690	0.00730	0.05124	0.00085	0.60039	317.0	5.4	322.1	5.2	280	38	322.1	5.2	1.6	Single Age
12WPY49_67	478.00	6.57	0.59700	0.01200	0.07480	0.00140	0.16446	474.6	7.8	465.1	8.4	508	43	465.1	8.4	2.0	Single Age
12WPY49_68	204.40	1.37	0.59560	0.00870	0.07590	0.00130	0.55502	474.9	5.4	471.6	7.8	484	32	471.6	7.8	0.7	Single Age
12WPY49_69	325.00	6.50	0.52800	0.02400	0.06830	0.00390	0.04517	430.0	16.0	426.0	23.0	450	160	426.0	23.0	0.9	Rim
12WPY49_69	107.00	0.77	0.83800	0.01200	0.09980	0.00120	0.41072	618.0	6.7	613.0	7.3	653	34	613.0	7.3	0.8	Core
12WPY49_70	525.00	2.20	0.85500	0.01400	0.10110	0.00190	0.89460	626.8	7.7	621.0	11.0	647	21	621.0	11.0	0.9	Single Age
12WPY49_71	121.70	1.77	1.81100	0.03600	0.17200	0.00160	0.12247	1048.0	13.0	1022.8	9.0	1099	37	1022.8	9.0	2.4	Single Age
12WPY49_72	308.00	3.50	10.82000	0.26000	0.44300	0.01000	0.98987	2493.0	31.0	2362.0	47.0	2616	18	2616.0	18.0	9.7	Single Age
12WPY49_74	58.10	1.19	1.62500	0.02100	0.16090	0.00170	0.29542	979.5	8.0	962.8	9.1	1025	27	962.8	9.1	1.7	Single Age
12WPY49_75	112.20	1.13	0.79800	0.01600	0.09180	0.00130	0.42356	595.8	9.2	566.2	7.6	710	39	566.2	7.6	5.0	Single Age
12WPY49_76	1219.00	31.60	0.39170	0.00580	0.05252	0.00082	0.78210	335.6	4.2	329.9	5.0	385	23	329.9	5.0	1.7	Rim
12WPY49_76	482.00	7.84	0.66800	0.01400	0.08100	0.00160	0.31423	519.0	8.3	501.9	9.7	581	44	501.9	9.7	3.3	Core
12WPY49_77	87.50	0.82	1.59800	0.02600	0.16060	0.00170	0.53293	968.0	10.0	960.2	9.4	988	30	960.2	9.4	0.8	Single Age
12WPY49_78	283.00	1.69	0.56280	0.00760	0.07160	0.00110	0.47844	453.1	4.9	446.0	6.7	479	34	446.0	6.7	1.6	Single Age
12WPY49_79	328.00	7.15	0.59400	0.01700	0.07370	0.00200	0.81905	473.0	11.0	458.0	12.0	506	51	458.0	12.0	3.2	Rim
12WPY49_79	100.00	0.77	0.93200	0.01800	0.10770	0.00180	0.28757	668.0	9.4	659.0	11.0	688	45	659.0	11.0	1.3	Core
12WPY49_80	190.80	1.70	0.83500	0.02100	0.08353	0.00085	0.00390	615.0	11.0	517.1	5.1	976	49	DISC	DISC	15.9	Single Age
12WPY49_81	331.00	15.30	0.33900	0.00790	0.04569	0.00069	0.01580	296.3	6.0	288.0	4.2	328	42	288.0	4.2	2.8	Rim
12WPY49_81	15.54	0.60	0.46300	0.03000	0.06210	0.00230	0.16700	385.0	21.0	388.0	14.0	360	150	388.0	14.0	0.8	Core
12WPY49_82	145.10	0.90	0.42390	0.00880	0.05712	0.00093	0.52895	360.1	6.3	358.0	5.7	366	42	358.0	5.7	0.6	Single Age
12WPY49_83	177.00	1.21	0.42370	0.00960	0.05670	0.00100	0.69606	358.2	6.8	355.7	6.2	391	32	355.7	6.2	0.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY49_84	705.00	5.18	6.52000	0.43000	0.34000	0.01200	0.97681	2036.0	56.0	1880.0	58.0	2176	49	2176.0	49.0	13.6	Single Age
12WPY49_85	152.80	1.32	13.86000	0.13000	0.51680	0.00540	0.94114	2739.5	9.2	2685.0	23.0	2785	10	2785.3	9.5	3.6	Single Age
12WPY49_86	1050.00	69.00	0.41900	0.02300	0.05690	0.00260	0.85911	355.0	16.0	357.0	16.0	343	63	357.0	16.0	0.6	Rim
12WPY49_86	610.00	2.40	0.61000	0.01200	0.07670	0.00150	0.76172	483.6	7.4	476.1	8.7	507	29	476.1	8.7	1.6	Rim
12WPY49_86	138.20	1.41	0.76500	0.01400	0.09206	0.00084	0.28872	576.3	8.2	567.7	4.9	607	42	567.7	4.9	1.5	Core
12WPY49_87	287.00	0.68	0.39040	0.00490	0.05329	0.00058	0.36552	334.5	3.6	334.7	3.5	346	26	334.7	3.5	0.1	Single Age
12WPY49_88	62.00	4.40	0.55400	0.03800	0.05670	0.00130	0.24195	442.0	25.0	355.2	7.8	880	140	DISC	DISC	19.6	Single Age
12WPY49_89	96.80	1.29	1.56700	0.01700	0.15970	0.00170	0.39553	956.8	6.8	955.1	9.7	953	27	955.1	9.7	0.2	Single Age
12WPY49_90	2552.00	2.60	0.57800	0.01400	0.06730	0.00130	0.48823	462.8	9.0	420.1	7.9	665	49	420.1	7.9	9.2	Rim
12WPY49_90	521.00	3.01	0.73000	0.01000	0.08775	0.00093	0.25239	556.5	5.8	542.2	5.5	609	28	542.2	5.5	2.6	Core
12WPY49_91	122.80	0.93	11.99000	0.22000	0.47530	0.00950	0.91833	2600.0	18.0	2510.0	41.0	2664	13	2664.0	13.0	5.8	Single Age
12WPY49_92	260.00	1.90	0.62600	0.01000	0.07776	0.00076	0.65686	493.2	6.2	482.7	4.5	520	22	482.7	4.5	2.1	Single Age
12WPY49_93	130.00	0.72	0.87700	0.02000	0.09910	0.00130	0.64207	638.0	11.0	609.1	7.6	750	36	609.1	7.6	4.5	Single Age
12WPY49_94	612.00	2.77	0.66000	0.00710	0.08180	0.00100	0.61894	514.4	4.3	506.7	6.2	552	24	506.7	6.2	1.5	Single Age
12WPY49_95	1268.00	37.10	0.40580	0.00750	0.05300	0.00150	0.76529	345.8	5.4	332.7	8.9	408	39	332.7	8.9	3.8	Rim
12WPY49_95	152.10	1.09	0.60000	0.01000	0.07587	0.00099	0.28284	477.2	6.6	471.4	5.9	487	43	471.4	5.9	1.2	Core
12WPY49_97	123.00	0.61	0.61550	0.00990	0.07816	0.00072	0.37592	486.7	6.3	485.1	4.3	506	36	485.1	4.3	0.3	Single Age
12WPY49_98	354.00	0.86	0.84070	0.00760	0.09965	0.00064	0.38289	619.4	4.2	612.4	3.8	649	20	612.4	3.8	1.1	Single Age
12WPY49_99	160.10	1.00	1.45900	0.01600	0.15140	0.00140	0.52131	913.1	6.8	908.7	7.7	943	21	908.7	7.7	0.5	Single Age
12WPY49_100	76.00	1.61	0.07860	0.00410	0.01093	0.00031	0.07983	77.2	3.8	70.1	2.0	320	130	70.1	2.0	9.2	Single Age
12WPY49_101	490.00	6.72	0.88370	0.00930	0.10305	0.00098	0.45526	642.9	5.0	633.2	5.9	688	24	633.2	5.9	1.5	Single Age
12WPY49_102	1320.00	32.50	0.38500	0.02400	0.04720	0.00190	0.61607	329.0	17.0	297.0	12.0	579	99	297.0	12.0	9.7	Single Age
12WPY49_103	89.90	0.65	0.77600	0.01500	0.09510	0.00130	0.45714	582.5	8.8	585.8	7.4	567	40	585.8	7.4	0.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY49_104	604.00	4.43	11.10000	0.13000	0.47450	0.00540	0.79820	2530.0	11.0	2503.0	24.0	2552	16	2552.0	16.0	1.9	Single Age
12WPY49_105	54.40	0.36	1.74100	0.03500	0.16830	0.00320	0.48531	1022.0	13.0	1002.0	18.0	1059	46	1002.0	18.0	2.0	Single Age
12WPY49_106	1860.00	4.25	0.55200	0.01000	0.05240	0.00190	0.66965	446.2	6.6	329.0	12.0	1093	53	DISC	DISC	26.3	Rim
12WPY49_106	402.00	1.30	0.86670	0.00950	0.10230	0.00120	0.53934	633.6	5.2	628.1	6.8	661	24	628.1	6.8	0.9	Core
12WPY49_107	288.00	2.68	1.46200	0.02000	0.14440	0.00180	0.81804	914.4	8.2	869.0	10.0	1027	17	869.0	10.0	5.0	Single Age
12WPY49_108	220.00	1.47	10.13000	0.40000	0.42500	0.01500	0.98592	2437.0	38.0	2277.0	68.0	2580	12	2580.0	12.0	11.7	Single Age
12WPY49_109	747.00	27.70	0.40200	0.00850	0.05508	0.00092	0.50843	343.0	6.2	345.6	5.6	343	31	345.6	5.6	0.8	Rim
12WPY49_109	254.00	2.24	1.14000	0.01600	0.12170	0.00160	0.62962	772.3	7.4	740.1	9.1	871	25	740.1	9.1	4.2	Core
12WPY49_111	81.30	1.23	0.95700	0.01300	0.10930	0.00100	0.42381	681.2	6.8	668.8	6.1	707	27	668.8	6.1	1.8	Single Age
12WPY49_112	139.00	58.00	0.72500	0.01900	0.09100	0.00230	0.45911	554.0	11.0	561.0	13.0	531	60	561.0	13.0	1.3	Rim
12WPY49_112	55.10	0.87	1.46900	0.03100	0.15010	0.00260	0.65360	917.0	13.0	901.0	14.0	935	30	901.0	14.0	1.7	Core
12WPY49_113	580.00	65.00	0.39100	0.04600	0.05350	0.00510	0.74609	334.0	34.0	336.0	32.0	310	160	336.0	32.0	0.6	Rim
12WPY49_113	628.00	3.43	0.70200	0.00930	0.08610	0.00110	0.81584	539.8	5.5	532.2	6.5	586	17	532.2	6.5	1.4	Core
12WPY49_114	498.00	3.02	0.69600	0.01000	0.08591	0.00089	0.79663	537.1	6.2	531.3	5.3	577	20	531.3	5.3	1.1	Single Age
12WPY49_115	111.00	1.01	0.73700	0.01300	0.09090	0.00130	0.43052	561.3	7.4	560.6	7.6	552	34	560.6	7.6	0.1	Single Age
12WPY49_116	176.00	1.73	0.41300	0.01100	0.05620	0.00110	0.73570	350.4	8.0	352.5	6.7	348	41	352.5	6.7	0.6	Single Age
12WPY49_117	78.00	4.40	0.44900	0.01800	0.05900	0.00150	0.55500	377.0	13.0	369.6	8.9	389	66	369.6	8.9	2.0	Single Age
12WPY49_118	366.00	1.46	3.02900	0.03200	0.23890	0.00260	0.80550	1414.4	8.1	1381.0	14.0	1457	13	1457.0	13.0	5.2	Single Age
12WPY49_119	427.00	2.45	4.68200	0.08900	0.28890	0.00530	0.89983	1762.0	16.0	1639.0	26.0	1901	19	1901.0	19.0	13.8	Single Age
12WPY49_120	278.00	1.41	0.34870	0.00530	0.04779	0.00054	0.24796	303.6	4.0	300.9	3.3	326	38	300.9	3.3	0.9	Single Age
12WPY54_1	709.00	13.70	0.34200	0.00370	0.04745	0.00046	0.76237	299.0	2.7	298.8	2.8	308	9	298.8	2.8	0.1	Single Age
12WPY54_2	183.00	1.12	0.97400	0.01200	0.11172	0.00083	0.56752	690.4	6.0	682.7	4.8	706	13	682.7	4.8	1.1	Single Age
12WPY54_3	203.50	0.58	1.16910	0.00990	0.12920	0.00110	0.48090	786.6	4.6	783.1	6.2	790	10	783.1	6.2	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY54_4	528.00	3.33	0.35390	0.00670	0.04760	0.00110	0.39066	307.5	5.0	299.5	6.5	392	28	299.5	6.5	2.6	Rim
12WPY54_4	97.00	0.99	0.50000	0.01400	0.05860	0.00130	0.33891	414.0	11.0	367.1	8.0	691	44	DISC	DISC	11.3	Core
12WPY54_5	63.10	0.98	1.03000	0.18000	0.06100	0.00190	0.83661	671.0	82.0	381.0	12.0	1600	240	DISC	DISC	43.2	Single Age
12WPY54_6	929.00	35.00	0.40200	0.01100	0.05360	0.00110	0.90772	343.7	7.9	336.5	6.7	402	16	336.5	6.7	2.1	Single Age
12WPY54_7	445.00	19.20	0.33000	0.00480	0.04482	0.00060	0.74879	289.5	3.7	282.6	3.7	342	17	282.6	3.7	2.4	Single Age
12WPY54_8	177.00	6.00	0.37900	0.01400	0.05030	0.00140	0.80016	325.0	10.0	316.5	8.6	364	23	316.5	8.6	2.6	Single Age
12WPY54_9	810.00	5.60	0.59420	0.00660	0.07472	0.00075	0.80942	473.4	4.2	464.5	4.5	515	8	464.5	4.5	1.9	Single Age
12WPY54_10	176.00	1.87	1.10700	0.01700	0.12030	0.00160	0.72024	758.5	8.6	732.1	9.4	852	15	732.1	9.4	3.5	Single Age
12WPY54_11	274.00	11.30	0.39700	0.01600	0.05280	0.00180	0.81216	339.0	12.0	332.0	11.0	396	29	332.0	11.0	2.1	Single Age
12WPY54_12	44.10	4.40	0.43700	0.02300	0.05570	0.00200	0.69210	366.0	16.0	351.0	13.0	480	37	351.0	13.0	4.1	Single Age
12WPY54_13	349.00	1.00	0.42110	0.00850	0.05530	0.00098	0.74450	356.6	6.1	346.9	6.0	418	19	346.9	6.0	2.7	Single Age
12WPY54_14	430.00	43.10	0.33530	0.00600	0.04567	0.00051	0.57529	293.5	4.6	287.9	3.1	343	16	287.9	3.1	1.9	Rim
12WPY54_14	79.00	1.10	0.47300	0.01200	0.06200	0.00120	0.64655	393.0	8.2	388.0	7.4	407	24	388.0	7.4	1.3	Core
12WPY54_15	155.00	9.80	0.50600	0.01100	0.04743	0.00078	0.13832	415.3	7.6	298.7	4.8	1128	51	DISC	DISC	28.1	Single Age
12WPY54_16	1070.00	25.70	0.34680	0.00820	0.04621	0.00085	0.78386	302.1	6.1	291.2	5.3	378	23	291.2	5.3	3.6	Single Age
12WPY54_17	39.40	1.72	0.49900	0.03000	0.05960	0.00180	0.43516	408.0	20.0	373.0	11.0	639	87	373.0	11.0	8.6	Single Age
12WPY54_18	193.00	1.56	1.11500	0.01100	0.12200	0.00120	0.34721	761.4	5.0	742.0	7.2	819	13	742.0	7.2	2.5	Single Age
12WPY54_19	580.00	100.50	0.31690	0.00480	0.04332	0.00044	0.44939	279.4	3.7	273.4	2.7	345	23	273.4	2.7	2.1	Rim
12WPY54_19	90.40	1.00	0.44200	0.01300	0.05930	0.00150	0.10374	371.3	9.4	371.2	9.2	347	43	371.2	9.2	0.0	Core
12WPY54_20	202.70	1.20	0.44380	0.00790	0.05900	0.00075	0.44097	373.7	5.8	369.5	4.6	400	24	369.5	4.6	1.1	Single Age
12WPY54_21	331.00	1.85	0.38060	0.00570	0.05068	0.00071	0.50973	328.0	4.0	318.7	4.4	406	20	318.7	4.4	2.8	Single Age
12WPY54_22	85.20	1.93	0.40660	0.00740	0.05316	0.00077	0.19809	346.2	5.3	333.9	4.7	434	29	333.9	4.7	3.6	Single Age
12WPY54_23	102.00	0.69	0.50800	0.02100	0.05928	0.00096	0.07308	415.0	14.0	371.2	5.8	669	71	DISC	DISC	10.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY54_24	472.00	19.10	0.33400	0.00700	0.04570	0.00100	0.56943	292.5	5.3	287.8	6.1	318	29	287.8	6.1	1.6	Rim
12WPY54_24	26.80	0.72	0.52800	0.02100	0.06120	0.00150	0.12655	429.0	14.0	382.8	9.2	690	58	DISC	DISC	10.8	Core
12WPY54_25	1168.00	5.80	0.98100	0.01100	0.10500	0.00130	0.90727	693.9	5.9	643.5	7.3	854	9	643.5	7.3	7.3	Single Age
12WPY54_26	848.00	119.00	0.32530	0.00340	0.04460	0.00055	0.59961	285.9	2.6	281.3	3.4	326	11	281.3	3.4	1.6	Rim
12WPY54_26	341.20	2.21	0.57700	0.00650	0.07521	0.00073	0.53988	462.5	4.2	467.5	4.4	441	15	467.5	4.4	1.1	Core
12WPY54_27	250.00	4.56	0.35920	0.00680	0.04880	0.00061	0.83314	311.4	5.1	307.1	3.7	333	16	307.1	3.7	1.4	Single Age
12WPY54_28	873.00	0.88	0.37290	0.00390	0.05077	0.00045	0.71205	321.7	2.9	319.2	2.8	346	11	319.2	2.8	0.8	Single Age
12WPY54_29	151.40	1.45	0.41770	0.00680	0.05519	0.00067	0.35049	354.2	4.9	346.3	4.1	396	25	346.3	4.1	2.2	Single Age
12WPY54_30	408.00	16.20	0.36100	0.00920	0.05040	0.00130	0.76595	312.7	6.9	317.0	8.0	274	26	317.0	8.0	1.4	Single Age
12WPY54_31	631.00	61.00	0.31970	0.00470	0.04523	0.00072	0.31429	281.6	3.6	285.2	4.5	275	30	285.2	4.5	1.3	Rim
12WPY54_31	55.70	1.40	0.40920	0.00950	0.05570	0.00100	0.20911	348.1	6.8	350.2	6.1	329	40	350.2	6.1	0.6	Core
12WPY54_32	206.00	5.98	0.36300	0.01100	0.04840	0.00120	0.80499	313.6	8.5	304.6	7.4	371	20	304.6	7.4	2.9	Single Age
12WPY54_33	73.00	1.84	0.41600	0.01600	0.05240	0.00160	0.41368	353.0	11.0	329.0	9.5	499	40	329.0	9.5	6.8	Single Age
12WPY54_34	147.00	5.08	0.35770	0.00960	0.04770	0.00076	0.26793	310.2	7.2	300.4	4.7	405	37	300.4	4.7	3.2	Single Age
12WPY54_35	435.00	27.90	0.32550	0.00520	0.04400	0.00046	0.60498	286.0	4.0	277.6	2.8	355	18	277.6	2.8	2.9	Single Age
12WPY54_36	376.00	6.24	0.62800	0.01300	0.07830	0.00160	0.71064	494.2	8.3	485.9	9.6	533	16	485.9	9.6	1.7	Single Age
12WPY54_37	291.00	0.94	1.41600	0.05800	0.14600	0.00450	0.94524	901.0	25.0	878.0	26.0	955	18	878.0	26.0	2.6	Single Age
12WPY54_38	1110.00	75.00	0.36710	0.00590	0.04981	0.00087	0.58896	317.5	4.4	313.3	5.4	352	21	313.3	5.4	1.3	Rim
12WPY54_38	142.80	1.90	0.67500	0.01700	0.08510	0.00180	0.83830	523.0	11.0	526.0	11.0	492	20	526.0	11.0	0.6	Core
12WPY54_39	200.00	1.02	0.43010	0.00660	0.05722	0.00077	0.70828	363.1	4.7	358.6	4.7	391	15	358.6	4.7	1.2	Single Age
12WPY54_40	288.00	4.85	0.39700	0.01100	0.05370	0.00130	0.80842	339.0	7.6	336.9	7.7	359	17	336.9	7.7	0.6	Single Age
12WPY54_41	300.10	3.04	5.30000	0.10000	0.21650	0.00330	0.90666	1872.0	16.0	1263.0	18.0	2647	11	DISC	DISC	52.3	Single Age
12WPY54_42	213.00	9.40	0.35140	0.00640	0.04893	0.00069	0.52655	305.6	4.8	307.9	4.3	308	24	307.9	4.3	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY54_43	582.00	10.30	0.33120	0.00550	0.04552	0.00074	0.86699	290.3	4.2	286.9	4.5	324	10	286.9	4.5	1.2	Single Age
12WPY54_44	60.10	0.87	0.44500	0.01100	0.05995	0.00099	0.26810	373.4	7.9	375.3	6.0	376	32	375.3	6.0	0.5	Single Age
12WPY54_45	570.00	45.00	0.32420	0.00680	0.04471	0.00080	0.74094	285.1	5.2	281.9	4.9	327	15	281.9	4.9	1.1	Rim
12WPY54_45	99.60	1.73	0.43450	0.00980	0.05769	0.00087	0.33234	366.1	7.0	361.5	5.3	435	29	361.5	5.3	1.3	Core
12WPY54_46	351.00	0.43	0.85400	0.00910	0.10180	0.00110	0.65675	626.7	5.0	625.0	6.6	637	8	625.0	6.6	0.3	Single Age
12WPY54_47	24.60	1.15	0.45000	0.02500	0.05910	0.00130	0.23993	377.0	17.0	370.3	7.7	466	48	370.3	7.7	1.8	Single Age
12WPY54_48	255.00	4.76	4.34100	0.09400	0.28330	0.00440	0.93681	1699.0	18.0	1607.0	22.0	1816	11	1816.0	11.0	11.5	Single Age
12WPY54_49	50.40	0.92	0.45500	0.01200	0.05550	0.00077	0.28102	382.7	7.7	348.2	4.7	600	32	348.2	4.7	9.0	Single Age
12WPY54_50	398.00	11.50	0.35150	0.00780	0.04834	0.00089	0.81764	305.6	5.9	304.3	5.5	316	14	304.3	5.5	0.4	Single Age
12WPY54_51	890.00	1.22	0.39220	0.00360	0.05217	0.00043	0.59072	335.9	2.6	327.8	2.7	390	11	327.8	2.7	2.4	Single Age
12WPY54_52	285.00	20.60	0.32890	0.00660	0.04515	0.00078	0.68493	288.5	5.0	284.6	4.8	321	23	284.6	4.8	1.4	Single Age
12WPY54_53	521.70	41.60	0.34700	0.00680	0.04585	0.00066	0.15377	302.2	5.1	288.9	4.0	417	25	288.9	4.0	4.4	Single Age
12WPY54_54	444.00	7.70	0.41200	0.02200	0.05470	0.00290	0.91743	348.0	16.0	345.0	18.0	420	22	345.0	18.0	0.9	Single Age
12WPY54_55	220.20	0.94	0.44310	0.00580	0.05965	0.00054	0.42311	372.3	4.1	373.5	3.3	364	16	373.5	3.3	0.3	Single Age
12WPY54_56	109.00	1.85	0.38490	0.00830	0.05299	0.00084	0.39116	330.3	6.1	332.8	5.1	325	20	332.8	5.1	0.8	Single Age
12WPY54_57	384.00	4.78	0.62400	0.01000	0.07730	0.00130	0.83574	492.3	6.4	480.2	7.6	546	13	480.2	7.6	2.5	Single Age
12WPY54_58	563.00	1.01	0.95400	0.02700	0.10900	0.00270	0.95915	679.0	14.0	668.0	15.0	735	12	668.0	15.0	1.6	Single Age
12WPY54_59	298.00	5.60	0.38200	0.01200	0.05170	0.00140	0.84572	328.0	8.9	325.0	8.8	349	20	325.0	8.8	0.9	Single Age
12WPY54_60	208.00	2.23	0.91300	0.03200	0.10580	0.00340	0.92908	657.0	17.0	648.0	20.0	688	20	648.0	20.0	1.4	Single Age
12WPY54_61	278.00	12.30	0.39000	0.01400	0.05170	0.00140	0.90297	333.0	10.0	324.9	8.5	370	23	324.9	8.5	2.4	Single Age
12WPY54_62	203.00	4.33	0.39000	0.01300	0.05320	0.00150	0.83971	333.8	9.1	333.9	9.4	337	20	333.9	9.4	0.0	Single Age
12WPY54_63	368.00	18.40	0.34000	0.00830	0.04760	0.00110	0.92568	296.8	6.2	299.8	6.8	283	12	299.8	6.8	1.0	Single Age
12WPY54_64	19.20	0.57	0.85000	0.03300	0.09050	0.00230	0.35421	623.0	18.0	559.0	14.0	865	43	DISC	DISC	10.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY54_65	323.00	0.60	0.66910	0.00840	0.08156	0.00098	0.67843	520.0	5.1	505.4	5.8	604	13	505.4	5.8	2.8	Single Age
12WPY54_66	81.40	1.08	0.43900	0.01300	0.05576	0.00091	0.01436	368.7	9.3	349.8	5.6	482	34	349.8	5.6	5.1	Single Age
12WPY54_67	67.00	0.72	0.47800	0.01100	0.06182	0.00096	0.43787	396.3	7.4	386.6	5.8	465	25	386.6	5.8	2.4	Single Age
12WPY54_68	84.00	0.70	0.72400	0.01300	0.08630	0.00100	0.53276	552.5	7.8	533.8	6.0	643	22	533.8	6.0	3.4	Single Age
12WPY54_69	200.00	4.57	0.38800	0.01000	0.05340	0.00130	0.78005	332.5	7.5	335.4	7.7	335	21	335.4	7.7	0.9	Single Age
12WPY54_70	701.00	2.71	0.64160	0.00470	0.08082	0.00060	0.56262	503.2	2.9	501.0	3.6	529	8	501.0	3.6	0.4	Single Age
12WPY54_71	350.00	2.10	7.00000	0.17000	0.32950	0.00590	0.95079	2109.0	22.0	1835.0	29.0	2395	14	2395.0	14.0	23.4	Single Age
12WPY54_73	225.00	4.90	0.41400	0.01500	0.05540	0.00180	0.81711	352.0	11.0	348.0	11.0	382	27	348.0	11.0	1.1	Single Age
12WPY54_74	387.00	1.21	0.80520	0.00900	0.09617	0.00081	0.52853	599.5	5.1	591.9	4.7	622	13	591.9	4.7	1.3	Single Age
12WPY54_75	245.00	11.00	0.40400	0.01800	0.05370	0.00180	0.72262	343.0	13.0	337.0	11.0	373	34	337.0	11.0	1.7	Single Age
12WPY54_76	409.00	11.20	0.34040	0.00670	0.04469	0.00070	0.74333	297.2	5.1	281.8	4.3	404	20	281.8	4.3	5.2	Single Age
12WPY54_77	147.00	3.90	0.35630	0.00640	0.04529	0.00051	0.35842	309.2	4.8	285.5	3.1	496	24	285.5	3.1	7.7	Single Age
12WPY54_78	159.60	3.38	0.73180	0.00690	0.08870	0.00084	0.38267	558.0	4.1	547.8	5.0	598	13	547.8	5.0	1.8	Single Age
12WPY54_79	79.60	0.57	1.18600	0.04800	0.09660	0.00190	0.09257	790.0	22.0	594.0	11.0	1395	87	DISC	DISC	24.8	Single Age
12WPY54_80	1006.00	4.54	0.86300	0.01100	0.09620	0.00160	0.80943	631.5	6.3	592.0	9.3	780	16	592.0	9.3	6.3	Single Age
12WPY54_81	377.00	3.08	3.35700	0.04200	0.23580	0.00330	0.87206	1493.6	9.7	1365.0	17.0	1676	7	1675.5	7.2	18.5	Single Age
12WPY54_82	590.00	3.25	0.35990	0.00470	0.04923	0.00059	0.85683	312.1	3.5	309.8	3.6	332	11	309.8	3.6	0.7	Single Age
12WPY54_83	151.00	3.60	0.40400	0.01300	0.05350	0.00110	0.35636	343.9	9.4	335.7	6.8	409	33	335.7	6.8	2.4	Single Age
12WPY54_84	89.00	1.47	1.72900	0.01900	0.17080	0.00180	0.42189	1019.9	7.2	1016.3	9.9	1038	11	1016.3	9.9	0.4	Single Age
12WPY54_85	65.00	1.55	0.44800	0.01700	0.05910	0.00150	0.12595	375.0	12.0	370.2	9.1	411	43	370.2	9.1	1.3	Single Age
12WPY54_86	864.00	1.90	0.71300	0.00670	0.08534	0.00084	0.73404	546.4	4.0	527.9	5.0	618	10	527.9	5.0	3.4	Single Age
12WPY54_87	336.00	15.00	0.33880	0.00890	0.04599	0.00092	0.68299	295.8	6.7	289.8	5.6	368	27	289.8	5.6	2.0	Single Age
12WPY54_88	75.80	1.92	0.40540	0.00800	0.05455	0.00068	0.39379	345.2	5.8	342.4	4.2	372	25	342.4	4.2	0.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY54_89	222.00	10.90	0.34370	0.00580	0.04792	0.00055	0.42904	299.8	4.4	301.8	3.4	313	26	301.8	3.4	0.7	Single Age
12WPY54_90	87.70	0.77	0.80700	0.01700	0.09130	0.00130	0.23710	600.2	9.4	563.3	7.7	756	41	563.3	7.7	6.1	Single Age
12WPY54_91	182.00	1.43	1.46300	0.01600	0.15050	0.00160	0.56172	914.7	6.6	903.9	8.8	942	9	903.9	8.8	1.2	Single Age
12WPY54_92	640.00	36.00	0.34900	0.01200	0.04660	0.00120	0.85273	303.4	8.6	293.4	7.5	402	29	293.4	7.5	3.3	Single Age
12WPY54_93	269.00	0.87	8.66000	0.22000	0.35190	0.00790	0.96582	2300.0	24.0	1942.0	38.0	2636	9	2636.0	9.4	26.3	Single Age
12WPY54_94	82.00	4.40	0.45500	0.01800	0.05090	0.00150	0.24117	379.0	12.0	320.1	8.9	730	79	DISC	DISC	15.5	Single Age
12WPY54_95	950.00	64.00	0.32640	0.00590	0.04469	0.00083	0.01493	286.7	4.5	281.9	5.1	377	45	281.9	5.1	1.7	Rim
12WPY54_95	37.00	0.74	0.45500	0.01300	0.06076	0.00098	0.10159	380.0	9.1	380.2	6.0	388	37	380.2	6.0	0.1	Core
12WPY54_96	412.00	1.78	0.66400	0.01200	0.07778	0.00071	0.18239	516.6	7.5	482.8	4.2	675	38	482.8	4.2	6.5	Single Age
12WPY54_97	190.00	0.93	0.75290	0.00690	0.09224	0.00076	0.59479	569.8	4.0	568.7	4.5	575	11	568.7	4.5	0.2	Single Age
12WPY54_98	654.00	19.20	0.35150	0.00400	0.04764	0.00046	0.50709	305.8	3.0	300.0	2.8	371	13	300.0	2.8	1.9	Single Age
12WPY54_99	719.00	0.92	0.41310	0.00530	0.05502	0.00056	0.64367	351.0	3.8	345.2	3.4	393	11	345.2	3.4	1.7	Single Age
12WPY54_100	172.20	1.43	0.63300	0.01600	0.07970	0.00130	0.58676	497.4	9.8	494.4	7.5	544	33	494.4	7.5	0.6	Rim
12WPY54_100	125.70	1.84	0.84700	0.01600	0.09960	0.00160	0.67327	622.7	8.9	612.0	9.3	661	16	612.0	9.3	1.7	Core
12WPY54_101	185.60	3.22	0.39500	0.01000	0.04931	0.00085	0.71309	337.5	7.2	310.3	5.2	537	25	310.3	5.2	8.1	Single Age
12WPY54_102	125.80	4.80	0.39390	0.00820	0.04825	0.00073	0.44650	337.7	5.8	303.7	4.5	584	22	DISC	DISC	10.1	Single Age
12WPY54_103	154.10	53.00	0.41400	0.01200	0.05340	0.00140	0.85579	351.3	8.4	335.4	8.7	475	17	335.4	8.7	4.5	Single Age
12WPY54_104	89.80	1.88	0.83100	0.02500	0.10120	0.00110	0.51165	623.0	11.0	621.6	6.5	642	26	621.6	6.5	0.2	Single Age
12WPY54_105	68.00	1.82	0.40370	0.00980	0.05129	0.00085	0.01449	343.9	7.1	322.4	5.2	497	39	322.4	5.2	6.3	Single Age
12WPY54_106	196.00	11.00	0.39400	0.01400	0.05310	0.00130	0.77427	336.8	9.7	333.5	8.2	347	28	333.5	8.2	1.0	Single Age
12WPY54_107	264.00	0.95	0.77880	0.00560	0.09433	0.00066	0.44670	584.7	3.2	581.1	3.9	602	9	581.1	3.9	0.6	Single Age
12WPY54_108	107.70	1.06	0.47300	0.01100	0.05894	0.00073	0.04501	393.0	7.5	369.2	4.4	529	29	369.2	4.4	6.1	Single Age
12WPY54_109	132.20	0.83	0.80920	0.00850	0.09660	0.00093	0.48933	601.8	4.8	594.4	5.4	641	14	594.4	5.4	1.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY54_110	69.00	3.30	0.40500	0.01200	0.05420	0.00120	0.43396	345.4	8.7	339.9	7.5	397	34	339.9	7.5	1.6	Single Age
12WPY54_111	352.00	0.68	0.32940	0.00740	0.04411	0.00056	0.36047	289.0	5.7	278.3	3.5	400	42	278.3	3.5	3.7	Single Age
12WPY54_112	62.00	1.37	0.42200	0.01200	0.05617	0.00099	0.35582	357.9	8.2	352.3	6.0	381	32	352.3	6.0	1.6	Single Age
12WPY54_113	232.00	1.79	1.85400	0.02300	0.17460	0.00200	0.77439	1064.3	8.1	1039.0	10.0	1101	11	1039.0	10.0	2.4	Single Age
12WPY54_114	453.00	1.40	1.30100	0.02000	0.12500	0.00230	0.85232	845.8	8.9	759.0	13.0	1063	13	DISC	DISC	10.3	Single Age
12WPY54_115	442.00	14.10	0.34640	0.00500	0.04775	0.00055	0.72015	301.9	3.8	300.7	3.4	312	14	300.7	3.4	0.4	Single Age
12WPY54_116	171.00	0.64	4.14000	0.12000	0.25390	0.00620	0.92801	1658.0	24.0	1457.0	32.0	1916	14	1916.0	14.0	24.0	Single Age
12WPY54_117	187.00	2.48	6.07700	0.07000	0.35080	0.00410	0.81105	1986.0	10.0	1938.0	20.0	2037	6	2037.1	6.2	4.9	Single Age
12WPY54_118	402.00	20.30	0.32070	0.00430	0.04469	0.00052	0.68595	282.3	3.3	281.8	3.2	295	14	281.8	3.2	0.2	Single Age
12WPY54_119	255.70	1.85	0.76190	0.00970	0.09230	0.00110	0.77287	574.9	5.6	569.3	6.5	601	11	569.3	6.5	1.0	Single Age
12WPY54_120	398.00	7.00	4.92700	0.08000	0.29610	0.00440	0.92682	1807.0	14.0	1671.0	22.0	1964	7	1963.8	7.0	14.9	Single Age
12WPY57_1	304.00	1.98	0.33580	0.00510	0.04565	0.00056	0.50433	293.8	3.9	287.8	3.5	331	31	287.8	3.5	2.0	Single Age
12WPY57_2	219.00	0.63	0.86100	0.01900	0.10330	0.00270	0.77831	631.0	11.0	633.0	16.0	625	38	633.0	16.0	0.3	Single Age
12WPY57_3	47.30	2.64	1.27500	0.05600	0.13850	0.00290	0.95322	830.0	21.0	836.0	16.0	811	65	836.0	16.0	0.7	Single Age
12WPY57_4	189.00	1.31	0.44000	0.02100	0.05027	0.00087	0.19584	368.0	14.0	316.2	5.3	694	99	DISC	DISC	14.1	Single Age
12WPY57_5	148.00	1.04	0.87800	0.01800	0.10320	0.00200	0.68334	639.1	9.5	633.0	12.0	644	35	633.0	12.0	1.0	Single Age
12WPY57_6	224.00	10.70	0.60500	0.01600	0.07300	0.00200	0.42560	480.0	10.0	454.0	12.0	617	51	454.0	12.0	5.4	Rim
12WPY57_6	156.30	1.27	13.29000	0.48000	0.42700	0.01800	0.80753	2696.0	34.0	2290.0	80.0	3008	38	3008.0	38.0	23.9	Core
12WPY57_7	53.55	0.81	0.83900	0.02600	0.09350	0.00210	0.40189	617.0	14.0	576.0	12.0	770	64	576.0	12.0	6.6	Single Age
12WPY57_8	90.60	2.57	1.12600	0.03100	0.12290	0.00260	0.76059	764.0	15.0	747.0	15.0	825	46	747.0	15.0	2.2	Single Age
12WPY57_9	48.40	1.28	1.16600	0.02100	0.12830	0.00200	0.42541	783.7	9.7	778.0	12.0	817	37	778.0	12.0	0.7	Single Age
12WPY57_10	292.00	1.64	0.79510	0.00660	0.09664	0.00089	0.41434	593.9	3.7	594.7	5.2	605	20	594.7	5.2	0.1	Single Age
12WPY57_11	44.70	0.87	0.73100	0.01400	0.08900	0.00140	0.34581	557.4	8.6	549.5	8.1	608	42	549.5	8.1	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY57_12	113.60	1.13	2.58600	0.03300	0.22220	0.00320	0.63793	1295.7	9.3	1293.0	17.0	1315	23	1315.0	23.0	1.7	Single Age
12WPY57_13	92.90	1.60	8.64000	0.22000	0.41750	0.00990	0.83037	2301.0	24.0	2247.0	45.0	2330	24	2330.0	24.0	3.6	Single Age
12WPY57_14	72.40	0.97	2.31000	0.03100	0.20610	0.00230	0.67047	1214.8	9.5	1210.0	13.0	1249	21	1249.0	21.0	3.1	Single Age
12WPY57_15	793.00	4.14	0.41710	0.00810	0.05500	0.00100	0.57419	353.9	5.8	345.1	6.1	445	39	345.1	6.1	2.5	Single Age
12WPY57_16	216.00	1.69	6.99000	0.24000	0.37500	0.01100	0.82301	2115.0	29.0	2048.0	52.0	2156	37	2156.0	37.0	5.0	Single Age
12WPY57_17	354.00	2.03	0.34960	0.00410	0.04805	0.00048	0.39440	304.3	3.1	302.5	2.9	313	29	302.5	2.9	0.6	Single Age
12WPY57_18	403.00	1.10	0.86470	0.00710	0.10243	0.00073	0.48002	632.5	3.9	628.6	4.3	657	17	628.6	4.3	0.6	Single Age
12WPY57_19	89.90	4.21	10.96000	0.13000	0.44910	0.00520	0.78205	2520.0	11.0	2394.0	23.0	2633	13	2633.0	13.0	9.1	Single Age
12WPY57_20	195.00	0.44	0.77500	0.01400	0.09320	0.00180	0.37653	582.1	7.7	574.0	10.0	641	42	574.0	10.0	1.4	Single Age
12WPY57_21	452.00	5.59	0.86200	0.09100	0.10270	0.00650	0.78034	629.0	49.0	630.0	38.0	640	140	630.0	38.0	0.2	Rim
12WPY57_21	488.00	1.31	1.59100	0.01400	0.15840	0.00130	0.66635	966.4	5.6	947.9	7.1	1013	15	947.9	7.1	1.9	Core
12WPY57_22	365.00	2.84	11.64000	0.18000	0.47050	0.00860	0.83452	2575.0	14.0	2485.0	37.0	2674	19	2674.0	19.0	7.1	Single Age
12WPY57_23	184.00	167.00	0.41400	0.01900	0.05360	0.00190	0.56121	352.0	14.0	337.0	12.0	459	89	337.0	12.0	4.3	Rim
12WPY57_23	138.60	2.16	0.61900	0.01800	0.07690	0.00170	0.72609	490.0	12.0	477.8	9.9	543	42	477.8	9.9	2.5	Core
12WPY57_24	93.70	0.49	0.38130	0.00630	0.05215	0.00060	0.16896	327.8	4.6	327.7	3.7	325	43	327.7	3.7	0.0	Single Age
12WPY57_25	92.50	0.90	1.35400	0.03200	0.13050	0.00270	0.83446	868.0	14.0	791.0	16.0	1052	29	791.0	16.0	8.9	Single Age
12WPY57_26	410.00	1.39	1.20000	0.04000	0.12660	0.00270	0.80145	802.0	19.0	768.0	15.0	869	37	768.0	15.0	4.2	Single Age
12WPY57_27	131.20	0.66	1.61500	0.02700	0.15680	0.00280	0.68722	975.0	11.0	938.0	15.0	1067	30	938.0	15.0	3.8	Single Age
12WPY57_28	222.00	1.56	9.77000	0.12000	0.44050	0.00550	0.90074	2412.0	12.0	2352.0	24.0	2470	9	2469.9	8.9	4.8	Single Age
12WPY57_30	40.00	0.41	5.67800	0.05900	0.33950	0.00310	0.48672	1928.6	8.8	1884.0	15.0	1977	18	1977.0	18.0	4.7	Single Age
12WPY57_31	142.00	1.19	0.36020	0.00540	0.04901	0.00069	0.23542	312.2	4.1	308.4	4.2	344	42	308.4	4.2	1.2	Single Age
12WPY57_32	72.30	0.87	0.88500	0.01500	0.10550	0.00150	0.30312	644.3	8.4	646.4	8.7	632	38	646.4	8.7	0.3	Single Age
12WPY57_33	100.00	0.67	1.64700	0.02800	0.16710	0.00240	0.61091	992.0	11.0	996.0	13.0	980	31	996.0	13.0	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY57_34	144.00	2.10	1.80600	0.01900	0.17780	0.00170	0.37242	1047.2	6.7	1054.7	9.1	1042	21	1054.7	9.1	0.7	Single Age
12WPY57_35	573.00	50.00	0.41000	0.02100	0.05630	0.00340	0.49494	348.0	15.0	353.0	21.0	330	130	353.0	21.0	1.4	Rim
12WPY57_35	161.00	1.20	0.80300	0.02200	0.09490	0.00230	0.76728	597.0	12.0	584.0	13.0	620	38	584.0	13.0	2.2	Core
12WPY57_36	379.00	7.98	0.74600	0.01300	0.09100	0.00190	0.73520	565.3	7.3	561.0	11.0	583	32	561.0	11.0	0.8	Single Age
12WPY57_37	148.00	28.20	0.88200	0.01200	0.10500	0.00180	0.59339	642.4	6.5	645.0	10.0	647	29	645.0	10.0	0.4	Single Age
12WPY57_38	99.70	1.92	1.31200	0.08100	0.12710	0.00520	0.69531	846.0	35.0	771.0	30.0	1075	62	771.0	30.0	8.9	Single Age
12WPY57_39	233.00	0.84	1.62700	0.02500	0.16300	0.00290	0.78947	981.0	9.6	973.0	16.0	1008	23	973.0	16.0	0.8	Single Age
12WPY57_40	152.80	3.88	1.03000	0.01000	0.11783	0.00092	0.37661	719.5	5.3	718.0	5.3	733	20	718.0	5.3	0.2	Single Age
12WPY57_41	184.00	5.53	0.87500	0.01800	0.10470	0.00220	0.60210	638.6	9.6	641.0	13.0	611	43	641.0	13.0	0.4	Single Age
12WPY57_42	191.00	1.44	0.35470	0.00910	0.04830	0.00100	0.69057	307.8	6.9	304.3	6.2	317	41	304.3	6.2	1.1	Single Age
12WPY57_43	170.00	0.90	1.14800	0.01300	0.12620	0.00150	0.60860	777.0	6.1	765.8	8.3	814	23	765.8	8.3	1.4	Single Age
12WPY57_44	54.00	0.98	1.31900	0.02900	0.14150	0.00310	0.46056	856.0	12.0	853.0	18.0	825	49	853.0	18.0	0.4	Single Age
12WPY57_45	67.40	1.12	1.74600	0.02200	0.17060	0.00210	0.48330	1027.1	8.3	1015.0	12.0	1063	28	1015.0	12.0	1.2	Single Age
12WPY57_46	172.00	1.16	1.10500	0.05200	0.09900	0.00240	0.06062	750.0	24.0	608.0	14.0	1210	110	DISC	DISC	18.9	Single Age
12WPY57_47	231.00	8.60	0.63590	0.00780	0.08095	0.00074	0.53671	499.6	4.9	501.8	4.4	485	24	501.8	4.4	0.4	Single Age
12WPY57_48	325.00	2.56	0.38400	0.01200	0.05090	0.00110	0.82515	329.2	9.0	320.2	6.5	411	45	320.2	6.5	2.7	Rim
12WPY57_48	374.00	1.16	1.37800	0.03400	0.14020	0.00290	0.85067	879.0	15.0	846.0	17.0	981	27	846.0	17.0	3.8	Core
12WPY57_49	372.00	1.70	0.52300	0.03600	0.05160	0.00180	0.64232	427.0	24.0	324.0	11.0	1000	160	DISC	DISC	24.1	Rim
12WPY57_49	149.40	1.54	1.26500	0.01600	0.12930	0.00190	0.68766	830.0	7.1	784.0	11.0	964	26	784.0	11.0	5.5	Core
12WPY57_50	159.00	1.04	0.68480	0.00780	0.08444	0.00088	0.30167	529.4	4.7	522.5	5.2	558	28	522.5	5.2	1.3	Single Age
12WPY57_51	215.00	1.09	5.38700	0.03700	0.33430	0.00270	0.68540	1882.4	5.9	1859.0	13.0	1905	10	1905.0	10.0	2.4	Single Age
12WPY57_52	168.70	0.83	1.29300	0.01700	0.13870	0.00180	0.59106	842.3	7.3	836.9	9.9	874	25	836.9	9.9	0.6	Single Age
12WPY57_53	192.00	0.95	5.61400	0.08400	0.33220	0.00490	0.90141	1917.0	13.0	1848.0	24.0	1984	12	1984.0	12.0	6.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY57_54	323.00	4.24	0.75430	0.00910	0.09098	0.00082	0.56808	570.5	5.3	561.3	4.8	621	21	561.3	4.8	1.6	Single Age
12WPY57_57	122.00	1.19	3.51700	0.03200	0.26720	0.00290	0.68852	1531.6	7.0	1526.0	15.0	1542	16	1542.0	16.0	1.0	Single Age
12WPY57_58	410.00	1.46	0.39640	0.00420	0.05373	0.00052	0.47253	339.0	3.0	337.4	3.2	340	23	337.4	3.2	0.5	Single Age
12WPY57_59	180.00	1.17	10.90900	0.09900	0.45770	0.00490	0.79129	2514.9	8.4	2429.0	22.0	2583	11	2583.0	11.0	6.0	Single Age
12WPY57_60	423.00	1.58	0.87700	0.01000	0.10530	0.00120	0.68364	639.8	5.3	645.5	6.9	625	20	645.5	6.9	0.9	Single Age
12WPY57_61	170.40	0.54	0.68400	0.01000	0.08430	0.00130	0.35597	529.7	6.3	521.9	7.5	554	38	521.9	7.5	1.5	Single Age
12WPY57_62	187.00	2.90	1.73300	0.01500	0.16920	0.00160	0.52668	1020.6	5.6	1007.8	8.6	1047	18	1007.8	8.6	1.3	Single Age
12WPY57_63	450.00	39.80	0.92100	0.00650	0.10767	0.00066	0.53110	662.8	3.4	659.2	3.9	670	15	659.2	3.9	0.5	Single Age
12WPY57_64	234.00	4.27	1.05400	0.00800	0.12055	0.00080	0.31550	730.7	3.9	733.7	4.6	709	18	733.7	4.6	0.4	Single Age
12WPY57_65	77.60	1.34	0.98400	0.01500	0.11340	0.00130	0.44618	695.4	7.5	692.4	7.6	703	35	692.4	7.6	0.4	Single Age
12WPY57_66	54.00	0.79	1.55500	0.02300	0.15600	0.00160	0.43730	951.5	9.2	935.3	9.1	974	30	935.3	9.1	1.7	Single Age
12WPY57_67	272.20	1.41	0.94100	0.02000	0.10450	0.00160	0.76797	672.0	10.0	640.9	9.3	786	26	640.9	9.3	4.6	Single Age
12WPY57_68	365.00	1.49	0.37040	0.00560	0.05117	0.00088	0.53424	319.8	4.2	321.7	5.4	293	42	321.7	5.4	0.6	Single Age
12WPY57_69	203.80	4.45	1.63000	0.01400	0.16510	0.00150	0.62901	981.6	5.6	984.8	8.3	969	15	984.8	8.3	0.3	Single Age
12WPY57_70	72.40	23.00	0.93500	0.04900	0.11030	0.00310	0.27769	674.0	24.0	674.0	18.0	590	110	674.0	18.0	0.0	Rim
12WPY57_70	90.70	1.30	1.50500	0.02300	0.15520	0.00210	0.33761	932.0	9.1	930.0	12.0	933	36	930.0	12.0	0.2	Core
12WPY57_71	383.00	1.34	0.96800	0.01000	0.11280	0.00130	0.73301	687.2	5.1	688.9	7.8	676	19	688.9	7.8	0.2	Single Age
12WPY57_72	414.00	4.61	10.51000	0.12000	0.42430	0.00500	0.65052	2482.0	11.0	2280.0	22.0	2641	19	2641.0	19.0	13.7	Single Age
12WPY57_73	285.00	1.47	0.68600	0.00800	0.08390	0.00110	0.56385	530.2	4.8	519.6	6.7	558	25	519.6	6.7	2.0	Single Age
12WPY57_74	487.00	13.00	1.88900	0.04800	0.17270	0.00290	0.88510	1074.0	17.0	1027.0	16.0	1168	22	1027.0	16.0	4.4	Single Age
12WPY57_75	87.00	0.43	0.89100	0.02200	0.10370	0.00260	0.52403	646.0	12.0	638.0	16.0	683	49	638.0	16.0	1.2	Single Age
12WPY57_76	311.00	6.38	0.59220	0.00620	0.07495	0.00069	0.53782	472.2	3.9	465.9	4.1	502	23	465.9	4.1	1.3	Single Age
12WPY57_77	59.80	1.57	0.82200	0.01800	0.09550	0.00130	0.14056	608.5	9.9	587.7	7.4	646	49	587.7	7.4	3.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY57_78	133.50	1.10	1.61500	0.02200	0.16230	0.00180	0.61198	976.6	8.4	969.6	9.9	996	25	969.6	9.9	0.7	Single Age
12WPY57_79	361.00	9.80	0.85000	0.01200	0.09920	0.00140	0.54376	624.2	6.4	609.7	8.4	670	29	609.7	8.4	2.3	Single Age
12WPY57_80	187.40	1.40	1.47900	0.02600	0.15300	0.00320	0.60334	922.0	11.0	917.0	18.0	924	36	917.0	18.0	0.5	Single Age
12WPY57_82	83.40	0.56	0.84800	0.01500	0.10120	0.00150	0.46595	622.9	8.4	621.1	8.8	614	36	621.1	8.8	0.3	Single Age
12WPY57_83	1130.00	9.74	0.84800	0.02700	0.09900	0.00270	0.88474	623.0	15.0	609.0	16.0	672	38	609.0	16.0	2.2	Rim
12WPY57_83	283.30	0.84	1.28300	0.01500	0.13700	0.00120	0.68439	839.2	6.7	827.6	6.6	856	19	827.6	6.6	1.4	Core
12WPY57_84	286.00	25.00	1.00600	0.04600	0.11620	0.00400	0.17470	706.0	23.0	708.0	23.0	740	160	708.0	23.0	0.3	Rim
12WPY57_84	63.90	1.30	1.36600	0.02200	0.14110	0.00200	0.35221	875.3	9.6	851.0	11.0	918	30	851.0	11.0	2.8	Core
12WPY57_85	606.00	3.28	1.85000	0.02000	0.17470	0.00190	0.82153	1063.1	7.1	1038.0	10.0	1108	13	1038.0	10.0	2.4	Single Age
12WPY57_86	324.00	4.39	1.06300	0.01200	0.12080	0.00140	0.73432	736.8	5.6	735.3	8.2	725	20	735.3	8.2	0.2	Single Age
12WPY57_87	225.00	3.33	0.40160	0.00680	0.05352	0.00072	0.41128	342.6	5.0	336.1	4.4	346	43	336.1	4.4	1.9	Single Age
12WPY57_88	550.00	2.42	8.90000	0.16000	0.38110	0.00580	0.70322	2325.0	16.0	2084.0	28.0	2529	23	2529.0	23.0	17.6	Single Age
12WPY57_89	654.00	12.40	0.48700	0.01700	0.06130	0.00140	0.73765	405.0	11.0	383.7	8.7	494	49	383.7	8.7	5.3	Rim
12WPY57_89	433.00	1.15	0.77270	0.00820	0.09390	0.00100	0.47179	581.2	4.7	578.6	6.0	598	24	578.6	6.0	0.4	Core
12WPY57_90	344.00	1.47	9.97000	0.22000	0.41900	0.01500	0.58251	2432.0	21.0	2254.0	66.0	2567	47	2567.0	47.0	12.2	Single Age
12WPY57_91	81.20	0.63	3.65300	0.05600	0.23970	0.00350	0.71273	1560.0	12.0	1385.0	18.0	1793	20	1793.0	20.0	22.8	Single Age
12WPY57_92	229.90	0.83	9.16000	0.30000	0.39000	0.01100	0.95649	2349.0	30.0	2125.0	53.0	2561	14	2561.0	14.0	17.0	Single Age
12WPY57_93	204.00	1.17	0.82400	0.01900	0.09710	0.00220	0.64366	611.5	9.9	597.0	13.0	636	44	597.0	13.0	2.4	Single Age
12WPY57_94	109.40	0.68	0.78800	0.01100	0.09400	0.00100	0.32162	589.5	6.3	578.8	5.9	628	32	578.8	5.9	1.8	Single Age
12WPY57_95	122.70	0.70	0.99500	0.03200	0.09460	0.00180	0.72312	701.0	17.0	583.0	11.0	1100	38	DISC	DISC	16.8	Rim
12WPY57_95	61.00	1.18	1.74900	0.04300	0.16950	0.00390	0.72096	1026.0	16.0	1009.0	22.0	1060	35	1009.0	22.0	1.7	Core
12WPY57_96	445.00	1.60	11.19000	0.43000	0.45200	0.01900	0.69268	2538.0	35.0	2399.0	85.0	2617	57	2617.0	57.0	8.3	Single Age
12WPY57_97	180.20	0.93	11.19000	0.13000	0.45850	0.00550	0.83060	2539.0	10.0	2432.0	24.0	2621	10	2620.8	9.6	7.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY57_98	129.10	0.68	1.59100	0.02400	0.15900	0.00260	0.53639	966.0	9.3	951.0	14.0	974	30	951.0	14.0	1.6	Single Age
12WPY57_99	88.00	0.46	0.84500	0.01300	0.09990	0.00110	0.28844	621.6	7.2	613.6	6.6	627	35	613.6	6.6	1.3	Single Age
12WPY57_100	86.00	0.76	19.04000	0.50000	0.55500	0.01100	0.81021	3046.0	25.0	2843.0	44.0	3178	22	3178.0	22.0	10.5	Single Age
12WPY57_101	423.00	1.83	7.49000	0.13000	0.34150	0.00630	0.91044	2171.0	16.0	1892.0	30.0	2434	15	2434.0	15.0	22.3	Single Age
12WPY57_102	159.20	1.13	5.67800	0.04700	0.35470	0.00330	0.68052	1927.6	7.1	1957.0	16.0	1898	13	1898.0	13.0	3.1	Single Age
12WPY57_103	386.00	6.48	1.70000	0.14000	0.16000	0.01200	0.50620	1006.0	54.0	954.0	67.0	1130	160	954.0	67.0	5.2	Rim
12WPY57_103	212.90	1.03	4.28300	0.05100	0.29060	0.00320	0.75258	1689.6	9.9	1644.0	16.0	1749	15	1749.0	15.0	6.0	Core
12WPY57_104	379.00	3.24	0.62270	0.00830	0.07958	0.00095	0.72271	491.3	5.2	493.6	5.7	483	22	493.6	5.7	0.5	Single Age
12WPY57_105	352.00	5.40	0.95500	0.01500	0.11100	0.00160	0.78771	681.1	8.0	678.3	9.4	696	21	678.3	9.4	0.4	Single Age
12WPY57_106	267.00	2.33	1.70500	0.02500	0.16800	0.00260	0.81574	1010.0	9.3	1001.0	14.0	1033	18	1001.0	14.0	0.9	Single Age
12WPY57_107	95.70	0.99	10.44000	0.21000	0.43510	0.00940	0.74395	2476.0	18.0	2327.0	42.0	2592	26	2592.0	26.0	10.2	Single Age
12WPY57_108	88.80	1.15	1.36200	0.02100	0.14360	0.00220	0.47725	871.9	8.8	865.0	12.0	881	34	865.0	12.0	0.8	Single Age
12WPY57_109	194.00	2.50	0.67000	0.01400	0.08370	0.00120	0.72188	520.2	8.8	517.9	7.3	541	31	517.9	7.3	0.4	Single Age
12WPY57_110	95.00	0.94	1.61400	0.02100	0.16460	0.00180	0.62013	976.2	8.5	982.0	9.8	967	23	982.0	9.8	0.6	Single Age
12WPY57_111	69.00	5.00	1.16200	0.08400	0.11830	0.00790	0.67383	776.0	39.0	719.0	45.0	923	75	719.0	45.0	7.3	Single Age
12WPY57_112	16.46	5.89	0.90900	0.04900	0.10690	0.00510	0.66753	655.0	26.0	655.0	29.0	700	100	655.0	29.0	0.0	Rim
12WPY57_112	58.90	2.87	1.57100	0.03100	0.15900	0.00230	0.62720	958.0	12.0	951.0	13.0	997	32	951.0	13.0	0.7	Core
12WPY57_113	397.00	6.20	0.90600	0.01600	0.10320	0.00120	0.66838	654.4	8.3	633.1	6.8	725	27	633.1	6.8	3.3	Single Age
12WPY57_114	297.00	2.01	0.35450	0.00580	0.04886	0.00087	0.33421	308.7	4.5	307.5	5.4	313	42	307.5	5.4	0.4	Single Age
12WPY57_116	232.40	2.17	0.98700	0.01100	0.11210	0.00120	0.29208	696.7	5.9	685.1	6.7	741	26	685.1	6.7	1.7	Single Age
12WPY57_117	741.00	3.05	5.46000	0.08500	0.26520	0.00370	0.80797	1893.0	13.0	1516.0	19.0	2334	13	DISC	DISC	35.0	Single Age
12WPY57_118	289.00	2.62	0.86000	0.01000	0.10040	0.00110	0.66793	629.8	5.6	616.8	6.3	686	21	616.8	6.3	2.1	Single Age
12WPY57_119	190.20	0.77	0.85400	0.02000	0.10240	0.00290	0.70400	626.0	11.0	628.0	17.0	646	43	628.0	17.0	0.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY57_120	300.00	2.12	0.47700	0.03500	0.05910	0.00470	0.69488	395.0	24.0	370.0	29.0	560	140	370.0	29.0	6.3	Rim
12WPY57_120	123.20	1.24	1.08600	0.03600	0.11530	0.00230	0.84869	744.0	17.0	704.0	13.0	862	52	704.0	13.0	5.4	Core
12WPY58_1	120.00	0.50	1.74900	0.02200	0.17610	0.00190	0.64450	1026.1	8.1	1046.0	10.0	992	11	1046.0	10.0	1.9	Single Age
12WPY58_2	1086.00	2.61	0.35000	0.00670	0.04506	0.00090	0.07436	304.7	5.1	284.1	5.5	457	30	284.1	5.5	6.8	Single Age
12WPY58_3	231.00	2.21	10.73000	0.10000	0.43860	0.00360	0.81596	2499.7	8.8	2346.0	16.0	2629	7	2628.6	6.7	10.8	Single Age
12WPY58_4	164.20	1.21	1.18000	0.12000	0.10780	0.00140	0.74001	776.0	49.0	659.9	8.3	1110	130	DISC	DISC	15.0	Single Age
12WPY58_5	357.40	2.64	1.80800	0.01200	0.17590	0.00120	0.45527	1048.0	4.5	1044.4	6.6	1063	8	1044.4	6.6	0.3	Single Age
12WPY58_6	518.00	20.00	0.37080	0.00910	0.04871	0.00098	0.70487	321.5	7.1	306.5	6.0	419	32	306.5	6.0	4.7	Rim
12WPY58_6	139.40	1.27	0.71200	0.01400	0.08160	0.00110	0.28205	545.4	8.1	505.7	6.5	717	26	505.7	6.5	7.3	Core
12WPY58_7	143.40	1.09	0.78500	0.01100	0.09611	0.00098	0.32664	587.9	6.5	591.5	5.8	613	21	591.5	5.8	0.6	Single Age
12WPY58_8	45.80	1.14	1.64100	0.04500	0.16540	0.00320	0.78964	984.0	18.0	986.0	18.0	982	28	986.0	18.0	0.2	Single Age
12WPY58_9	220.00	6.40	0.95300	0.02300	0.11160	0.00210	0.73360	678.0	12.0	682.0	12.0	678	22	682.0	12.0	0.6	Single Age
12WPY58_10	261.00	17.90	0.88210	0.00930	0.10564	0.00099	0.35840	642.5	4.9	647.3	5.8	626	12	647.3	5.8	0.7	Single Age
12WPY58_11	370.00	2.75	0.56900	0.00540	0.07235	0.00057	0.32288	457.3	3.5	450.3	3.4	504	18	450.3	3.4	1.5	Single Age
12WPY58_12	137.00	1.62	0.61400	0.01200	0.07710	0.00120	0.54300	485.5	7.7	478.9	7.2	526	26	478.9	7.2	1.4	Single Age
12WPY58_13	444.00	1.66	0.43800	0.00600	0.05857	0.00054	0.08375	368.7	4.2	366.9	3.3	382	18	366.9	3.3	0.5	Single Age
12WPY58_14	95.00	1.78	13.95000	0.36000	0.56400	0.01400	0.95606	2741.0	25.0	2878.0	56.0	2635	7	2635.0	7.0	9.2	Single Age
12WPY58_15	143.40	0.60	1.58600	0.01500	0.15800	0.00120	0.15611	965.1	5.6	945.9	6.7	1012	15	945.9	6.7	2.0	Single Age
12WPY58_16	168.00	0.90	8.06900	0.07400	0.41480	0.00370	0.82503	2238.2	8.4	2236.0	17.0	2239	9	2238.7	9.0	0.1	Single Age
12WPY58_17	306.00	2.41	0.95500	0.02200	0.10350	0.00210	0.90968	681.0	11.0	635.0	12.0	837	11	635.0	12.0	6.8	Single Age
12WPY58_18	1261.00	23.91	0.38100	0.01300	0.04780	0.00130	0.45600	327.2	9.5	300.8	7.7	496	31	300.8	7.7	8.1	Single Age
12WPY58_19	372.00	5.47	0.95800	0.01200	0.11380	0.00140	0.72190	683.6	6.5	694.5	7.9	662	11	694.5	7.9	1.6	Single Age
12WPY58_20	206.10	1.17	1.39600	0.03700	0.14240	0.00360	0.90275	886.0	16.0	861.0	20.0	947	14	861.0	20.0	2.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY58_21	66.90	1.21	0.91500	0.02100	0.10740	0.00190	0.63806	659.0	11.0	657.0	11.0	661	28	657.0	11.0	0.3	Single Age
12WPY58_22	468.00	2.87	0.66720	0.00950	0.07890	0.00100	0.64326	518.8	5.8	489.2	6.3	654	15	489.2	6.3	5.7	Single Age
12WPY58_23	434.00	7.86	0.59070	0.00480	0.07575	0.00046	0.26062	471.2	3.1	470.7	2.8	483	11	470.7	2.8	0.1	Single Age
12WPY58_24	162.10	0.80	0.78360	0.00890	0.09515	0.00082	0.33080	587.3	5.0	585.9	4.9	600	16	585.9	4.9	0.2	Single Age
12WPY58_25	530.00	1.43	0.90050	0.00890	0.10705	0.00088	0.54876	651.8	4.7	655.6	5.1	646	10	655.6	5.1	0.6	Single Age
12WPY58_26	595.00	1.65	0.98800	0.03100	0.11420	0.00310	0.98127	695.0	16.0	697.0	18.0	704	11	697.0	18.0	0.3	Single Age
12WPY58_27	242.00	9.41	0.84580	0.00950	0.10090	0.00100	0.51834	622.2	5.2	619.8	5.9	640	12	619.8	5.9	0.4	Single Age
12WPY58_28	370.00	0.83	0.87180	0.00930	0.10337	0.00095	0.44135	636.3	5.1	634.1	5.6	647	15	634.1	5.6	0.3	Single Age
12WPY58_29	830.00	9.70	0.68460	0.00870	0.08598	0.00097	0.46316	529.3	5.3	531.7	5.8	528	14	531.7	5.8	0.5	Single Age
12WPY58_30	931.00	1.77	0.40600	0.00320	0.05525	0.00038	0.28256	345.9	2.3	346.7	2.4	342	10	346.7	2.4	0.2	Single Age
12WPY58_31	825.00	2.37	0.41670	0.00350	0.05654	0.00037	0.54002	354.0	2.5	354.6	2.3	357	9	354.6	2.3	0.2	Single Age
12WPY58_32	964.00	1.03	0.47300	0.01000	0.05156	0.00083	0.62888	393.1	7.1	324.1	5.1	845	74	DISC	DISC	17.6	Single Age
12WPY58_33	78.10	0.61	0.69000	0.03300	0.07090	0.00150	0.25443	526.0	17.0	441.3	8.9	938	66	DISC	DISC	16.1	Single Age
12WPY58_34	256.00	1.28	0.84200	0.01300	0.10040	0.00120	0.67212	619.5	7.0	616.7	7.3	642	15	616.7	7.3	0.5	Single Age
12WPY58_35	330.00	2.36	1.43100	0.04900	0.15050	0.00460	0.97172	899.0	21.0	903.0	26.0	876	17	903.0	26.0	0.4	Single Age
12WPY58_36	166.50	3.54	0.57980	0.00950	0.07350	0.00110	0.35892	464.0	6.1	457.2	6.4	502	20	457.2	6.4	1.5	Single Age
12WPY58_37	363.00	1.82	0.86000	0.00810	0.10246	0.00099	0.40624	630.0	4.4	628.8	5.8	636	12	628.8	5.8	0.2	Single Age
12WPY58_38	425.00	0.96	0.39100	0.00440	0.05379	0.00057	0.45857	335.0	3.2	337.7	3.5	333	14	337.7	3.5	0.8	Single Age
12WPY58_39	75.00	1.40	1.25700	0.04500	0.13610	0.00380	0.87781	827.0	20.0	822.0	21.0	840	26	822.0	21.0	0.6	Single Age
12WPY58_40	83.10	0.90	0.91300	0.01400	0.10610	0.00100	0.22476	658.0	7.3	650.2	6.1	693	23	650.2	6.1	1.2	Single Age
12WPY58_41	950.00	7.30	0.50800	0.01500	0.06034	0.00080	0.74144	416.0	10.0	377.7	4.9	637	46	377.7	4.9	9.2	Single Age
12WPY58_42	459.00	3.80	0.74600	0.00980	0.08952	0.00076	0.32971	565.6	5.6	552.7	4.5	630	25	552.7	4.5	2.3	Single Age
12WPY58_43	264.50	3.32	0.60270	0.00700	0.07642	0.00064	0.41428	478.8	4.5	474.7	3.8	496	14	474.7	3.8	0.9	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY58_44	266.00	1.81	6.66000	0.10000	0.36800	0.00430	0.86944	2066.0	14.0	2022.0	20.0	2113	11	2113.0	11.0	4.3	Single Age
12WPY58_45	432.00	1.56	0.71200	0.02400	0.08770	0.00220	0.96044	544.0	15.0	542.0	13.0	574	19	542.0	13.0	0.4	Single Age
12WPY58_46	88.10	0.87	1.50500	0.02400	0.15160	0.00150	0.22970	931.7	9.6	909.8	8.1	974	26	909.8	8.1	2.4	Single Age
12WPY58_47	230.10	1.88	0.93900	0.01000	0.10820	0.00120	0.65503	672.0	5.4	662.1	7.0	690	15	662.1	7.0	1.5	Single Age
12WPY58_48	303.10	1.51	0.72420	0.00770	0.08891	0.00072	0.29913	553.6	4.6	549.1	4.3	583	15	549.1	4.3	0.8	Single Age
12WPY58_50	697.00	8.29	1.00000	0.01300	0.11150	0.00150	0.73144	703.7	6.6	682.4	8.5	784	11	682.4	8.5	3.0	Single Age
12WPY58_51	81.00	0.99	1.50100	0.06400	0.14970	0.00410	0.85637	928.0	26.0	902.0	23.0	990	41	902.0	23.0	2.8	Single Age
12WPY58_52	68.20	0.93	0.83500	0.01400	0.09859	0.00097	0.36123	616.0	8.0	606.1	5.7	667	17	606.1	5.7	1.6	Single Age
12WPY58_53	94.60	0.53	0.86000	0.01900	0.10300	0.00130	0.34162	629.0	10.0	631.7	7.4	627	23	631.7	7.4	0.4	Single Age
12WPY58_54	195.00	1.32	1.89500	0.01800	0.18630	0.00180	0.38944	1078.9	6.5	1101.4	9.9	1037	13	1101.4	9.9	2.1	Single Age
12WPY58_55	648.00	0.92	0.66700	0.01200	0.08060	0.00140	0.87193	518.5	7.6	499.8	8.2	609	9	499.8	8.2	3.6	Single Age
12WPY58_56	884.00	1.56	1.02430	0.00670	0.11876	0.00088	0.61459	716.0	3.4	723.4	5.1	697	8	723.4	5.1	1.0	Single Age
12WPY58_57	130.90	0.36	1.00200	0.01300	0.10890	0.00100	0.21053	704.5	6.8	666.5	6.0	821	22	666.5	6.0	5.4	Single Age
12WPY58_58	113.50	0.44	0.79300	0.01100	0.09685	0.00096	0.27221	592.8	6.0	595.9	5.6	583	19	595.9	5.6	0.5	Single Age
12WPY58_59	288.00	86.90	0.86980	0.00980	0.10380	0.00110	0.47610	635.8	5.4	636.8	6.7	631	13	636.8	6.7	0.2	Single Age
12WPY58_60	400.00	0.76	0.39630	0.00410	0.05235	0.00056	0.57898	338.9	3.0	328.9	3.5	404	14	328.9	3.5	3.0	Single Age
12WPY58_61	79.30	2.55	0.98600	0.01400	0.11310	0.00110	0.13536	696.5	7.1	690.6	6.6	724	19	690.6	6.6	0.8	Single Age
12WPY58_62	605.00	0.69	0.74200	0.01100	0.09000	0.00120	0.83134	563.4	6.5	557.0	7.6	604	14	557.0	7.6	1.1	Single Age
12WPY58_63	155.80	1.67	0.95100	0.01500	0.11140	0.00140	0.55392	681.1	6.9	681.0	7.9	696	17	681.0	7.9	0.0	Single Age
12WPY58_64	143.10	1.34	0.66240	0.00980	0.08332	0.00093	0.38148	515.8	5.9	515.9	5.6	526	18	515.9	5.6	0.0	Single Age
12WPY58_65	298.00	9.70	0.63040	0.00810	0.07975	0.00071	0.23434	496.1	5.0	494.6	4.2	510	16	494.6	4.2	0.3	Single Age
12WPY58_66	67.40	5.00	1.09600	0.02600	0.12530	0.00230	0.61940	752.0	13.0	761.0	13.0	747	22	761.0	13.0	1.2	Single Age
12WPY58_67	449.00	2.39	0.51000	0.01600	0.06580	0.00180	0.93476	417.0	11.0	411.0	11.0	441	18	411.0	11.0	1.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY58_68	223.00	5.10	0.82700	0.01900	0.09950	0.00180	0.80965	611.0	11.0	611.0	10.0	628	17	611.0	10.0	0.0	Single Age
12WPY58_69	438.00	0.91	0.86900	0.01100	0.10160	0.00120	0.42598	634.9	5.9	623.9	6.8	677	14	623.9	6.8	1.7	Single Age
12WPY58_70	295.00	9.80	1.05400	0.04000	0.11820	0.00260	0.91855	732.0	19.0	720.0	15.0	763	38	720.0	15.0	1.6	Single Age
12WPY58_71	269.40	0.76	0.85740	0.00810	0.10270	0.00096	0.52374	628.5	4.4	630.2	5.6	626	12	630.2	5.6	0.3	Single Age
12WPY58_72	352.00	9.78	0.60500	0.01200	0.07720	0.00160	0.84911	480.2	7.2	481.0	10.0	503	11	481.0	10.0	0.2	Single Age
12WPY58_73	165.10	2.01	0.61820	0.00800	0.07877	0.00083	0.29850	488.5	5.0	488.7	5.0	494	18	488.7	5.0	0.0	Single Age
12WPY58_74	323.00	2.91	0.55300	0.01100	0.06980	0.00120	0.72031	446.4	7.1	434.6	7.2	513	15	434.6	7.2	2.6	Single Age
12WPY58_75	127.80	1.25	0.91500	0.01600	0.10390	0.00130	0.53651	659.1	8.5	637.1	7.6	706	20	637.1	7.6	3.3	Single Age
12WPY58_76	247.90	1.81	1.24500	0.02300	0.13370	0.00200	0.83768	822.0	11.0	809.0	11.0	870	14	809.0	11.0	1.6	Single Age
12WPY58_77	277.20	5.30	1.17200	0.04600	0.11850	0.00300	0.62529	787.0	21.0	722.0	17.0	945	39	722.0	17.0	8.3	Single Age
12WPY58_78	770.00	21.50	0.56170	0.00640	0.07248	0.00088	0.67090	452.5	4.1	451.1	5.3	461	10	451.1	5.3	0.3	Single Age
12WPY58_79	622.00	3.04	0.60840	0.00640	0.07783	0.00061	0.55972	482.4	4.1	483.2	3.6	486	12	483.2	3.6	0.2	Single Age
12WPY58_80	82.20	1.15	1.59500	0.02000	0.15630	0.00140	0.18374	967.7	7.9	936.0	7.6	1040	17	936.0	7.6	3.3	Single Age
12WPY58_81	148.00	1.86	0.73800	0.01300	0.09080	0.00120	0.56732	560.9	7.5	560.2	7.4	555	19	560.2	7.4	0.1	Single Age
12WPY58_82	796.00	1.21	0.37880	0.00360	0.05176	0.00047	0.50353	326.1	2.7	325.3	2.9	331	11	325.3	2.9	0.2	Single Age
12WPY58_83	125.70	2.71	0.98000	0.01400	0.10798	0.00097	0.36291	693.3	7.4	661.0	5.6	779	17	661.0	5.6	4.7	Single Age
12WPY58_84	204.00	0.87	1.57100	0.01500	0.15640	0.00150	0.50233	958.5	5.7	936.8	8.1	1017	10	936.8	8.1	2.3	Single Age
12WPY58_85	349.00	4.96	0.70600	0.01100	0.08768	0.00096	0.66471	541.7	6.4	541.7	5.7	546	13	541.7	5.7	0.0	Single Age
12WPY58_86	142.20	0.77	0.70900	0.01300	0.08160	0.00120	0.48604	543.8	7.8	505.4	7.4	678	19	505.4	7.4	7.1	Single Age
12WPY58_87	326.00	1.85	0.61120	0.00710	0.07801	0.00061	0.45978	484.1	4.5	484.2	3.6	489	12	484.2	3.6	0.0	Single Age
12WPY58_88	402.00	2.11	1.63100	0.01700	0.16160	0.00180	0.74334	982.1	6.5	965.0	10.0	1008	15	965.0	10.0	1.7	Single Age
12WPY58_89	904.00	45.05	0.41240	0.00310	0.05553	0.00033	0.43592	350.5	2.3	348.4	2.0	371	10	348.4	2.0	0.6	Single Age
12WPY58_90	100.20	0.78	0.93500	0.01400	0.10810	0.00110	0.03303	669.8	7.1	661.8	6.2	707	24	661.8	6.2	1.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY58_91	236.00	0.96	1.00600	0.01600	0.10780	0.00130	0.47173	706.2	8.1	659.8	7.4	849	25	659.8	7.4	6.6	Single Age
12WPY58_92	171.00	3.70	0.57170	0.00840	0.07444	0.00091	0.41313	459.6	5.6	462.8	5.5	484	18	462.8	5.5	0.7	Single Age
12WPY58_93	282.00	0.96	1.72900	0.02500	0.17050	0.00260	0.83097	1018.7	9.5	1015.0	14.0	1033	12	1015.0	14.0	0.4	Single Age
12WPY58_94	85.00	0.61	2.30700	0.03300	0.20560	0.00210	0.52349	1214.0	10.0	1207.0	12.0	1228	18	1228.0	18.0	1.7	Single Age
12WPY58_95	246.00	1.84	1.16600	0.01300	0.12780	0.00120	0.60541	784.5	5.9	775.5	6.9	804	12	775.5	6.9	1.1	Single Age
12WPY58_96	183.00	0.77	0.79500	0.01400	0.09240	0.00100	0.57303	593.3	8.0	569.6	6.1	701	21	569.6	6.1	4.0	Single Age
12WPY58_97	365.00	4.50	0.58460	0.00990	0.07373	0.00081	0.72446	467.0	6.3	458.5	4.9	514	16	458.5	4.9	1.8	Single Age
12WPY58_98	238.60	1.44	0.59730	0.00750	0.07578	0.00066	0.23772	475.3	4.7	470.9	3.9	508	21	470.9	3.9	0.9	Single Age
12WPY58_99	56.50	0.75	10.28000	0.16000	0.46180	0.00540	0.64347	2464.0	13.0	2447.0	24.0	2462	12	2462.0	12.0	0.6	Single Age
12WPY58_100	158.00	0.83	0.39690	0.00700	0.05406	0.00072	0.30991	339.2	5.1	339.4	4.4	346	21	339.4	4.4	0.1	Single Age
12WPY58_101	471.80	1.20	0.83570	0.00900	0.09908	0.00069	0.62832	616.5	5.0	609.0	4.1	647	11	609.0	4.1	1.2	Single Age
12WPY58_102	329.00	5.11	0.65100	0.02200	0.07760	0.00150	0.31391	509.0	13.0	481.7	9.2	626	47	481.7	9.2	5.4	Rim
12WPY58_102	234.60	5.75	2.15900	0.06000	0.15580	0.00250	0.90410	1166.0	19.0	933.0	14.0	1637	22	DISC	DISC	20.0	Core
12WPY58_103	137.00	0.91	0.87600	0.01500	0.10590	0.00140	0.32631	638.0	8.3	649.1	8.4	593	17	649.1	8.4	1.7	Single Age
12WPY58_104	819.00	16.00	0.80000	0.01700	0.09840	0.00280	0.45513	597.0	9.5	605.0	17.0	566	28	605.0	17.0	1.3	Rim
12WPY58_104	205.30	1.16	7.51100	0.07400	0.40760	0.00400	0.78879	2174.0	8.9	2204.0	18.0	2144	9	2144.4	8.9	2.8	Core
12WPY58_105	248.00	0.99	1.38400	0.01500	0.14750	0.00160	0.67056	881.6	6.4	886.8	9.2	864	10	886.8	9.2	0.6	Single Age
12WPY58_106	307.00	3.12	1.03800	0.01600	0.11660	0.00120	0.68028	723.6	7.7	711.2	7.2	754	13	711.2	7.2	1.7	Single Age
12WPY58_107	639.00	4.47	0.79430	0.00810	0.09636	0.00089	0.75771	593.4	4.6	593.0	5.3	604	8	593.0	5.3	0.1	Single Age
12WPY58_108	414.00	1.54	0.38180	0.00490	0.05231	0.00050	0.59592	328.3	3.6	328.7	3.1	337	13	328.7	3.1	0.1	Single Age
12WPY58_109	460.00	25.60	0.50800	0.01800	0.06720	0.00200	0.92526	416.0	12.0	419.0	12.0	415	18	419.0	12.0	0.7	Single Age
12WPY58_110	1900.00	3.70	0.45210	0.00790	0.05563	0.00046	0.29280	379.9	5.7	349.0	2.8	553	28	349.0	2.8	8.1	Single Age
12WPY58_111	189.00	1.04	0.81900	0.02000	0.09700	0.00160	0.79525	606.0	11.0	596.9	9.3	627	22	596.9	9.3	1.5	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY58_112	181.00	1.34	0.35190	0.00890	0.04630	0.00079	0.74188	305.8	6.7	291.7	4.9	423	22	291.7	4.9	4.6	Single Age
12WPY58_113	454.00	3.87	1.91100	0.06200	0.13010	0.00470	0.88077	1086.0	22.0	788.0	27.0	1773	27	DISC	DISC	27.4	Single Age
12WPY58_114	215.00	6.10	0.51900	0.01500	0.05370	0.00110	0.52044	426.0	10.0	337.2	7.0	954	51	DISC	DISC	20.8	Single Age
12WPY58_115	301.00	1.86	0.83200	0.02000	0.09880	0.00170	0.92002	614.0	11.0	607.0	9.7	653	15	607.0	9.7	1.1	Single Age
12WPY58_116	421.00	1.16	0.37370	0.00380	0.05097	0.00048	0.34647	322.3	2.8	320.5	2.9	337	14	320.5	2.9	0.6	Single Age
12WPY58_117	88.50	0.73	0.80800	0.01400	0.09360	0.00130	0.23752	601.8	7.8	576.6	7.9	701	23	576.6	7.9	4.2	Single Age
12WPY58_118	61.20	0.74	1.74000	0.03000	0.17590	0.00190	0.35311	1023.0	11.0	1044.0	10.0	977	19	1044.0	10.0	2.1	Single Age
12WPY58_119	210.00	2.00	4.16000	0.15000	0.24860	0.00770	0.95558	1671.0	31.0	1436.0	41.0	1986	15	1986.0	15.0	27.7	Single Age
12WPY58_120	310.60	3.37	2.83000	0.14000	0.19230	0.00710	0.98203	1359.0	35.0	1132.0	38.0	1748	22	DISC	DISC	16.7	Single Age
12WPY59_1	413.00	1.04	1.28500	0.03700	0.12620	0.00350	0.93236	837.0	17.0	766.0	20.0	1037	11	766.0	20.0	8.5	Single Age
12WPY59_2	235.20	2.23	1.23100	0.01900	0.13170	0.00140	0.63848	815.2	8.5	797.5	7.7	858	17	797.5	7.7	2.2	Single Age
12WPY59_3	199.50	1.39	0.84560	0.00920	0.10164	0.00086	0.36045	622.8	5.2	624.0	5.1	630	13	624.0	5.1	0.2	Single Age
12WPY59_4	65.20	0.93	1.36500	0.01700	0.14120	0.00140	0.30758	873.5	7.4	851.3	8.1	941	16	851.3	8.1	2.5	Single Age
12WPY59_5	340.50	1.99	5.72600	0.07000	0.32370	0.00440	0.68891	1935.0	11.0	1808.0	22.0	2068	10	2067.6	9.6	12.6	Single Age
12WPY59_6	380.00	1.15	0.97100	0.01800	0.10030	0.00090	0.14920	688.4	9.3	616.1	5.3	897	43	DISC	DISC	10.5	Single Age
12WPY59_7	146.60	1.31	2.01600	0.04000	0.17860	0.00330	0.71475	1120.0	13.0	1059.0	18.0	1230	20	1059.0	18.0	5.4	Single Age
12WPY59_8	605.00	8.60	1.02200	0.02200	0.10320	0.00120	0.03259	714.0	11.0	632.8	7.1	1002	53	DISC	DISC	11.4	Single Age
12WPY59_9	57.80	0.55	0.79300	0.02200	0.09660	0.00160	0.47923	592.0	12.0	594.6	9.3	613	32	594.6	9.3	0.4	Single Age
12WPY59_10	248.00	0.45	4.63000	0.08400	0.29290	0.00530	0.86136	1753.0	15.0	1655.0	26.0	1868	9	1868.4	9.2	11.4	Single Age
12WPY59_11	281.00	0.47	0.68020	0.00640	0.08592	0.00084	0.47140	526.7	3.9	531.4	5.0	526	13	531.4	5.0	0.9	Single Age
12WPY59_13	215.00	1.75	5.36000	0.15000	0.33050	0.00800	0.93176	1874.0	24.0	1839.0	39.0	1911	12	1911.0	12.0	3.8	Single Age
12WPY59_14	959.00	14.57	1.28500	0.06200	0.11690	0.00190	0.76896	835.0	25.0	713.0	11.0	1219	87	DISC	DISC	14.6	Single Age
12WPY59_15	314.00	0.69	1.82900	0.01900	0.17710	0.00140	0.67076	1055.5	6.7	1050.9	7.8	1068	10	1050.9	7.8	0.4	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY59_16	118.80	1.20	1.26100	0.01700	0.13970	0.00160	0.58615	827.6	7.5	843.1	9.1	803	14	843.1	9.1	1.9	Single Age
12WPY59_17	173.00	1.21	1.13900	0.01300	0.12590	0.00140	0.42544	772.6	6.6	764.5	7.8	786	15	764.5	7.8	1.0	Single Age
12WPY59_18	305.00	3.61	0.91560	0.00840	0.10648	0.00081	0.51886	660.5	4.3	652.2	4.7	703	11	652.2	4.7	1.3	Single Age
12WPY59_20	133.00	1.32	1.97400	0.05000	0.16560	0.00340	0.36160	1105.0	17.0	988.0	19.0	1355	52	DISC	DISC	10.6	Single Age
12WPY59_21	413.00	1.25	0.50700	0.01600	0.06190	0.00180	0.89969	415.0	11.0	387.0	11.0	585	16	387.0	11.0	6.7	Single Age
12WPY59_22	531.00	0.57	0.42330	0.00850	0.05560	0.00074	0.72288	358.1	6.0	348.8	4.5	426	24	348.8	4.5	2.6	Single Age
12WPY59_23	136.00	1.40	0.79400	0.01300	0.09570	0.00110	0.32033	593.2	7.1	589.1	6.7	614	19	589.1	6.7	0.7	Single Age
12WPY59_24	541.00	1.34	0.83290	0.00820	0.09760	0.00110	0.62029	615.8	4.7	600.1	6.2	676	12	600.1	6.2	2.5	Single Age
12WPY59_25	106.10	0.75	4.89900	0.03500	0.32710	0.00270	0.40365	1803.4	6.0	1824.0	13.0	1776	9	1776.3	9.0	2.7	Single Age
12WPY59_26	78.50	1.46	4.91500	0.04600	0.33180	0.00340	0.56667	1804.3	7.9	1847.0	16.0	1761	9	1761.1	9.3	4.9	Single Age
12WPY59_27	1391.00	66.20	0.93750	0.00690	0.10760	0.00081	0.72223	672.0	3.7	658.8	4.7	716	8	658.8	4.7	2.0	Single Age
12WPY59_28	27.98	0.56	6.04800	0.07200	0.35880	0.00350	0.41046	1983.0	10.0	1978.0	17.0	1989	9	1989.4	9.4	0.6	Single Age
12WPY59_29	255.00	1.16	4.48000	0.11000	0.27080	0.00640	0.93175	1725.0	21.0	1544.0	33.0	1944	10	1943.8	9.6	20.6	Single Age
12WPY59_30	199.00	0.50	10.83000	0.20000	0.47460	0.00980	0.75275	2510.0	17.0	2502.0	43.0	2522	16	2522.0	16.0	0.8	Single Age
12WPY59_31	545.00	2.83	0.88900	0.01200	0.10400	0.00160	0.51483	645.2	6.4	637.9	9.1	679	15	637.9	9.1	1.1	Single Age
12WPY59_32	56.70	1.10	1.18600	0.02000	0.12560	0.00170	0.45134	793.5	9.2	762.7	9.6	894	19	762.7	9.6	3.9	Single Age
12WPY59_33	409.10	2.60	0.82690	0.00990	0.09770	0.00150	0.78090	611.7	5.5	601.0	9.1	628	13	601.0	9.1	1.7	Single Age
12WPY59_34	1045.00	6.02	0.79500	0.01200	0.08788	0.00097	0.23039	593.5	6.7	542.9	5.8	782	23	542.9	5.8	8.5	Single Age
12WPY59_35	77.10	0.41	7.25000	0.26000	0.36790	0.00620	0.83604	2142.0	32.0	2019.0	29.0	2270	35	2270.0	35.0	11.1	Single Age
12WPY59_36	660.00	60.90	0.38090	0.00640	0.05030	0.00063	0.52618	327.6	4.7	316.3	3.9	412	23	316.3	3.9	3.4	Single Age
12WPY59_37	222.00	1.97	0.51400	0.01900	0.06100	0.00200	0.85726	420.0	13.0	381.0	12.0	660	20	381.0	12.0	9.3	Single Age
12WPY59_38	137.90	1.26	1.37800	0.02100	0.14410	0.00170	0.67639	879.1	9.0	867.9	9.8	920	18	867.9	9.8	1.3	Single Age
12WPY59_39	442.00	39.00	0.37300	0.01400	0.05000	0.00140	0.84250	322.0	11.0	314.2	8.5	380	34	314.2	8.5	2.4	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY59_39	232.70	0.55	0.71740	0.00890	0.08646	0.00090	0.34832	549.0	5.3	534.5	5.3	617	17	534.5	5.3	2.6	Core
12WPY59_40	309.00	1.45	12.65000	0.20000	0.49350	0.00660	0.92046	2653.0	15.0	2585.0	29.0	2703	7	2702.8	7.0	4.4	Single Age
12WPY59_42	242.00	1.50	0.87810	0.00970	0.10470	0.00120	0.61832	641.0	5.3	641.8	6.9	639	10	641.8	6.9	0.1	Single Age
12WPY59_43	24.40	0.28	0.90000	0.03000	0.09920	0.00250	0.20366	655.0	16.0	610.0	14.0	785	46	610.0	14.0	6.9	Single Age
12WPY59_44	535.00	64.80	0.34350	0.00810	0.04820	0.00140	0.84214	299.5	6.1	303.1	8.5	287	22	303.1	8.5	1.2	Single Age
12WPY59_46	941.00	2.36	4.23000	0.14000	0.24710	0.00470	0.92629	1675.0	28.0	1423.0	24.0	2015	27	2015.0	27.0	29.4	Single Age
12WPY59_47	86.90	1.08	1.82200	0.02400	0.18110	0.00190	0.53665	1052.8	8.5	1074.0	10.0	1010	13	1074.0	10.0	2.0	Single Age
12WPY59_48	122.10	1.39	0.95000	0.01800	0.11000	0.00140	0.29769	677.3	9.3	672.8	8.0	694	20	672.8	8.0	0.7	Single Age
12WPY59_49	377.00	4.35	1.42100	0.03300	0.15040	0.00250	0.87324	897.0	14.0	903.0	14.0	884	21	903.0	14.0	0.7	Single Age
12WPY59_50	261.00	2.17	1.75600	0.05300	0.17500	0.00430	0.97105	1026.0	21.0	1039.0	24.0	996	19	1039.0	24.0	1.3	Single Age
12WPY59_51	820.00	3.48	0.92300	0.03500	0.10860	0.00310	0.78576	666.0	18.0	664.0	18.0	677	18	664.0	18.0	0.3	Single Age
12WPY59_52	117.10	0.45	0.71000	0.01900	0.08830	0.00180	0.86019	544.0	11.0	545.0	10.0	532	21	545.0	10.0	0.2	Single Age
12WPY59_53	120.30	1.03	0.88600	0.01000	0.10569	0.00096	0.31050	644.7	5.5	648.4	5.5	638	14	648.4	5.5	0.6	Single Age
12WPY59_54	582.00	1.97	1.57300	0.02000	0.15430	0.00170	0.76130	959.1	7.9	926.2	9.7	1036	10	926.2	9.7	3.4	Single Age
12WPY59_55	137.70	0.96	7.50900	0.04800	0.41910	0.00310	0.63908	2174.6	5.9	2256.0	14.0	2096	6	2095.9	6.3	7.6	Single Age
12WPY59_56	746.00	0.88	0.40560	0.00500	0.05430	0.00063	0.76170	346.0	3.7	340.8	3.8	362	10	340.8	3.8	1.5	Single Age
12WPY59_57	142.00	1.63	4.68000	0.13000	0.27400	0.00640	0.90512	1761.0	24.0	1560.0	32.0	2012	19	2012.0	19.0	22.5	Single Age
12WPY59_58	221.00	1.78	3.02500	0.02600	0.24840	0.00220	0.77349	1413.6	6.6	1430.0	11.0	1388	6	1387.7	5.5	3.0	Single Age
12WPY59_59	23.80	0.82	1.81400	0.04200	0.17900	0.00340	0.39688	1051.0	15.0	1061.0	19.0	1031	24	1061.0	19.0	1.0	Single Age
12WPY59_60	120.90	0.86	4.35300	0.09400	0.28090	0.00560	0.91993	1703.0	18.0	1595.0	28.0	1838	7	1837.8	7.4	13.2	Single Age
12WPY59_61	62.90	0.55	7.05400	0.07200	0.40460	0.00330	0.53759	2117.5	9.1	2190.0	15.0	2055	10	2055.4	9.5	6.5	Single Age
12WPY59_62	115.10	0.78	0.73400	0.01500	0.08690	0.00120	0.56564	559.2	8.8	536.9	7.3	658	23	536.9	7.3	4.0	Single Age
12WPY59_63	377.00	1.80	0.40380	0.00650	0.05554	0.00093	0.72131	344.2	4.7	348.4	5.7	340	17	348.4	5.7	1.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY59_64	123.40	0.85	1.12400	0.01900	0.12380	0.00160	0.57317	766.4	8.5	752.5	9.2	829	19	752.5	9.2	1.8	Single Age
12WPY59_65	389.00	1.39	1.77500	0.01300	0.17060	0.00120	0.61417	1036.1	4.7	1015.4	6.8	1087	9	1015.4	6.8	2.0	Single Age
12WPY59_66	297.60	2.42	6.52300	0.04500	0.37620	0.00260	0.55878	2048.8	6.0	2059.0	12.0	2048	8	2048.0	7.9	0.5	Single Age
12WPY59_67	225.00	1.94	1.80900	0.01500	0.17600	0.00150	0.47066	1048.6	5.2	1044.8	8.4	1052	12	1044.8	8.4	0.4	Single Age
12WPY59_68	550.00	2.53	0.31920	0.00390	0.04355	0.00046	0.27582	281.2	3.0	274.8	2.8	325	21	274.8	2.8	2.3	Single Age
12WPY59_69	481.00	1.82	1.19600	0.01100	0.12900	0.00110	0.64185	798.4	5.0	781.8	6.4	849	9	781.8	6.4	2.1	Single Age
12WPY59_70	263.20	0.96	0.79900	0.01000	0.09663	0.00094	0.60542	596.1	5.8	594.6	5.5	601	15	594.6	5.5	0.3	Single Age
12WPY59_71	1050.00	4.52	0.67200	0.01000	0.08330	0.00130	0.83172	521.6	6.4	515.4	7.8	553	10	515.4	7.8	1.2	Single Age
12WPY59_72	1800.00	1.61	0.74300	0.02100	0.08000	0.00210	0.89600	564.0	12.0	496.0	13.0	841	18	DISC	DISC	12.1	Rim
12WPY59_72	321.00	1.22	1.09800	0.01500	0.12160	0.00200	0.59264	753.4	7.2	740.0	12.0	793	11	740.0	12.0	1.8	Core
12WPY59_73	316.00	2.99	9.19700	0.09500	0.38480	0.00460	0.84039	2358.6	9.7	2101.0	21.0	2590	5	2589.7	5.1	18.9	Single Age
12WPY59_74	46.56	0.86	1.48400	0.02100	0.15050	0.00190	0.33201	924.4	8.5	904.0	10.0	985	21	904.0	10.0	2.2	Single Age
12WPY59_75	366.00	14.64	0.80670	0.00690	0.09696	0.00077	0.37592	600.5	3.9	596.6	4.5	613	15	596.6	4.5	0.6	Single Age
12WPY59_76	23.60	0.87	0.99900	0.02800	0.11610	0.00180	0.14799	703.0	14.0	708.0	10.0	692	32	708.0	10.0	0.7	Single Age
12WPY59_77	103.40	1.79	1.75600	0.01900	0.17640	0.00190	0.45664	1028.8	6.8	1047.0	10.0	984	12	1047.0	10.0	1.8	Single Age
12WPY59_78	141.40	8.43	0.80700	0.00920	0.09510	0.00120	0.48307	600.5	5.2	585.4	6.8	679	18	585.4	6.8	2.5	Single Age
12WPY59_79	868.00	5.14	3.80300	0.07800	0.24850	0.00370	0.94594	1595.0	17.0	1431.0	19.0	1817	11	1817.0	11.0	21.2	Rim
12WPY59_79	86.40	0.72	6.40500	0.09800	0.37770	0.00580	0.62579	2032.0	13.0	2065.0	27.0	1994	14	1994.0	14.0	3.6	Core
12WPY59_80	255.00	6.43	0.61000	0.01000	0.07750	0.00120	0.76333	483.1	6.4	481.2	7.0	494	17	481.2	7.0	0.4	Single Age
12WPY59_81	69.70	1.18	1.02800	0.02000	0.11580	0.00150	0.10042	717.3	9.9	706.0	8.8	735	28	706.0	8.8	1.6	Single Age
12WPY59_82	193.00	0.64	0.89700	0.02000	0.10730	0.00160	0.46042	649.0	11.0	657.1	9.2	669	43	657.1	9.2	1.2	Single Age
12WPY59_83	353.00	3.99	0.57830	0.00850	0.07454	0.00093	0.71131	463.8	5.6	463.4	5.6	470	14	463.4	5.6	0.1	Single Age
12WPY59_84	60.00	0.62	1.67500	0.02900	0.16460	0.00230	0.50750	998.0	11.0	982.0	13.0	1034	18	982.0	13.0	1.6	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY59_85	118.40	0.41	1.58600	0.03100	0.14880	0.00170	0.44401	963.0	12.0	893.9	9.4	1123	22	893.9	9.4	7.2	Single Age
12WPY59_86	278.00	0.98	0.34330	0.00760	0.04383	0.00044	0.33305	299.4	5.8	276.5	2.7	482	40	276.5	2.7	7.6	Single Age
12WPY59_87	230.10	0.30	5.70500	0.03700	0.34340	0.00280	0.77763	1931.9	5.6	1903.0	14.0	1963	5	1962.6	4.9	3.0	Single Age
12WPY59_88	199.00	0.71	1.54000	0.11000	0.12600	0.00140	0.77648	932.0	40.0	764.9	7.9	1330	110	DISC	DISC	17.9	Single Age
12WPY59_89	5.04	28.60	8.92000	0.24000	0.08560	0.00330	0.08999	2330.0	24.0	529.0	19.0	4848	31	DISC	DISC	77.3	Single Age
12WPY59_90	114.50	1.03	0.96000	0.02400	0.10510	0.00190	0.71498	684.0	12.0	644.0	11.0	815	18	644.0	11.0	5.8	Single Age
12WPY59_91	363.00	3.98	0.64800	0.01100	0.07683	0.00099	0.74757	507.1	6.7	477.1	5.9	660	17	477.1	5.9	5.9	Single Age
12WPY59_92	202.00	1.04	5.44300	0.03700	0.34570	0.00270	0.58807	1892.1	5.8	1914.0	13.0	1876	8	1875.6	7.6	2.0	Single Age
12WPY59_93	266.00	3.25	7.65000	0.21000	0.38700	0.01000	0.95875	2187.0	25.0	2107.0	48.0	2273	11	2273.0	11.0	7.3	Single Age
12WPY59_94	298.00	1.13	1.50400	0.01400	0.15130	0.00130	0.67836	931.7	5.9	908.0	7.2	986	9	908.0	7.2	2.5	Single Age
12WPY59_95	362.00	1.32	0.40600	0.00590	0.05395	0.00054	0.44262	345.8	4.2	338.7	3.3	380	18	338.7	3.3	2.1	Single Age
12WPY59_96	134.70	0.73	0.69650	0.00890	0.08619	0.00089	0.37281	536.4	5.3	532.9	5.3	545	16	532.9	5.3	0.7	Single Age
12WPY59_97	103.40	0.48	0.72800	0.01000	0.09180	0.00100	0.19747	556.2	6.0	566.2	6.0	527	17	566.2	6.0	1.8	Single Age
12WPY59_98	55.95	0.92	5.46300	0.06900	0.33600	0.00380	0.55139	1894.0	11.0	1867.0	18.0	1917	16	1917.0	16.0	2.6	Single Age
12WPY59_99	224.10	0.32	1.69900	0.01600	0.17260	0.00130	0.22020	1008.0	6.0	1026.3	7.4	969	14	1026.3	7.4	1.8	Single Age
12WPY59_101	91.70	0.80	5.60700	0.04300	0.35120	0.00260	0.48699	1917.7	6.7	1940.0	12.0	1900	10	1899.7	9.5	2.1	Single Age
12WPY59_102	238.00	2.49	0.59400	0.01000	0.07628	0.00076	0.79743	472.9	6.6	473.8	4.5	476	15	473.8	4.5	0.2	Single Age
12WPY59_103	314.00	2.74	11.88000	0.19000	0.49990	0.00660	0.84683	2595.0	15.0	2613.0	28.0	2574	10	2574.0	10.0	1.5	Single Age
12WPY59_104	188.00	58.00	0.78600	0.01400	0.09390	0.00160	0.28372	588.7	7.9	578.5	9.6	635	31	578.5	9.6	1.7	Rim
12WPY59_104	123.30	0.72	1.56900	0.02300	0.15590	0.00150	0.29119	957.9	9.1	933.9	8.2	1029	20	933.9	8.2	2.5	Core
12WPY59_105	122.60	1.55	1.52800	0.01800	0.15370	0.00190	0.57867	942.4	7.4	921.0	11.0	985	17	921.0	11.0	2.3	Single Age
12WPY59_106	229.40	2.77	1.91100	0.03100	0.15900	0.00180	0.69447	1084.0	11.0	951.0	10.0	1365	18	DISC	DISC	12.3	Single Age
12WPY59_107	892.00	0.78	3.58600	0.05900	0.22040	0.00350	0.94753	1550.0	13.0	1286.0	19.0	1928	5	DISC	DISC	33.3	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
12WPY59_108	237.90	2.28	1.43700	0.01600	0.14770	0.00150	0.59975	904.0	6.7	887.9	8.2	947	10	887.9	8.2	1.8	Single Age
12WPY59_109	274.80	5.50	0.57520	0.00710	0.07407	0.00083	0.77443	461.9	4.8	460.6	5.0	460	16	460.6	5.0	0.3	Single Age
12WPY59_110	271.00	9.40	0.94600	0.03200	0.11120	0.00290	0.25997	680.0	15.0	684.0	19.0	664	44	684.0	19.0	0.6	Single Age
12WPY59_111	232.40	0.68	0.78400	0.01000	0.09440	0.00110	0.43486	588.2	6.1	581.6	6.5	625	14	581.6	6.5	1.1	Single Age
12WPY59_112	80.60	0.51	0.87000	0.01500	0.09870	0.00240	0.44493	635.2	8.3	607.0	14.0	750	30	607.0	14.0	4.4	Single Age
12WPY59_113	82.70	0.88	1.52600	0.02200	0.15560	0.00170	0.32061	940.2	8.7	932.1	9.6	944	22	932.1	9.6	0.9	Single Age
12WPY59_114	95.20	1.26	9.12000	0.12000	0.39890	0.00540	0.80878	2349.0	12.0	2163.0	25.0	2516	9	2516.1	8.5	14.0	Single Age
12WPY59_115	230.00	3.02	4.92000	0.17000	0.23100	0.00590	0.67401	1803.0	29.0	1339.0	31.0	2397	26	DISC	DISC	44.1	Single Age
12WPY59_116	98.60	1.28	0.84700	0.01500	0.09640	0.00140	0.58336	622.1	8.2	593.1	8.3	748	17	593.1	8.3	4.7	Single Age
12WPY59_117	252.00	2.71	0.87300	0.03400	0.09040	0.00280	0.92469	635.0	18.0	558.0	16.0	924	23	DISC	DISC	12.1	Single Age
12WPY59_118	91.60	0.66	6.64600	0.08600	0.38210	0.00370	0.30543	2064.0	11.0	2088.0	18.0	2042	11	2042.0	11.0	2.3	Single Age
12WPY59_119	100.30	1.47	1.03600	0.02000	0.11170	0.00190	0.60085	721.5	9.9	682.0	11.0	838	20	682.0	11.0	5.5	Single Age
12WPY59_120	112.10	1.96	1.39300	0.01900	0.14760	0.00170	0.44565	885.3	7.8	887.2	9.6	891	15	887.2	9.6	0.2	Single Age
13WPY06_1	635.00	6.35	0.35690	0.00470	0.04941	0.00055	0.67248	309.8	3.5	310.9	3.4	310	24	310.9	3.4	0.4	Single Age
13WPY06_2	161.20	2.79	0.62480	0.00770	0.08013	0.00086	0.05144	492.6	4.8	496.9	5.1	488	29	496.9	5.1	0.9	Single Age
13WPY06_3	184.50	5.37	0.80090	0.00800	0.09745	0.00081	0.46503	597.1	4.5	599.4	4.8	595	22	599.4	4.8	0.4	Single Age
13WPY06_4	572.00	1.47	0.42410	0.00400	0.05677	0.00051	0.46931	358.9	2.8	355.9	3.1	385	22	355.9	3.1	0.8	Single Age
13WPY06_5	178.00	6.88	0.60910	0.00810	0.07756	0.00098	0.60027	482.8	5.1	481.5	5.8	513	25	481.5	5.8	0.3	Single Age
13WPY06_6	676.00	10.80	0.37900	0.01000	0.05130	0.00120	0.94043	325.8	7.4	322.3	7.1	351	21	322.3	7.1	1.1	Single Age
13WPY06_7	362.00	66.00	5.42000	0.17000	0.32090	0.00800	0.94792	1887.0	27.0	1792.0	39.0	1982	18	1982.0	18.0	9.6	Single Age
13WPY06_8	326.00	0.91	0.43300	0.00620	0.05813	0.00070	0.85525	365.1	4.4	364.2	4.3	370	24	364.2	4.3	0.2	Single Age
13WPY06_9	489.00	35.90	0.36800	0.01100	0.05090	0.00110	0.60791	318.2	8.3	320.3	6.5	330	39	320.3	6.5	0.7	Rim
13WPY06_9	208.50	0.48	11.27000	0.21000	0.45950	0.00790	0.89631	2544.0	17.0	2437.0	35.0	2618	15	2618.0	15.0	6.9	Core

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY06_10	83.40	0.95	1.03700	0.01600	0.11870	0.00160	0.22176	722.1	7.9	722.9	9.0	722	38	722.9	9.0	0.1	Single Age
13WPY06_11	501.00	23.20	0.36570	0.00870	0.04910	0.00100	0.05734	316.4	6.4	309.0	6.3	347	64	309.0	6.3	2.3	Rim
13WPY06_11	44.30	1.18	0.91300	0.02600	0.10650	0.00180	0.43147	657.0	14.0	652.0	10.0	656	57	652.0	10.0	0.8	Core
13WPY06_12	272.00	1.63	1.29900	0.02200	0.13850	0.00190	0.20473	846.0	10.0	836.0	11.0	846	28	836.0	11.0	1.2	Single Age
13WPY06_13	69.60	0.63	5.59000	0.05500	0.35020	0.00440	0.73430	1914.0	8.5	1935.0	21.0	1904	14	1904.0	14.0	1.6	Single Age
13WPY06_14	420.00	8.40	0.43600	0.02600	0.05670	0.00250	0.85475	367.0	18.0	356.0	15.0	412	70	356.0	15.0	3.0	Rim
13WPY06_14	98.60	0.62	1.00900	0.01700	0.11590	0.00130	0.34950	708.1	8.7	707.1	7.4	724	38	707.1	7.4	0.1	Core
13WPY06_15	388.00	1.41	0.43050	0.00530	0.05841	0.00064	0.67354	363.4	3.8	365.9	3.9	343	21	365.9	3.9	0.7	Single Age
13WPY06_16	74.63	0.54	5.02800	0.06700	0.32230	0.00390	0.74431	1823.0	11.0	1801.0	19.0	1855	17	1855.0	17.0	2.9	Single Age
13WPY06_17	291.00	34.50	0.74730	0.00770	0.09250	0.00110	0.44410	566.5	4.5	570.3	6.3	537	30	570.3	6.3	0.7	Single Age
13WPY06_18	129.50	1.06	5.46100	0.05800	0.31940	0.00280	0.72570	1893.9	9.1	1786.0	14.0	2025	14	2025.0	14.0	11.8	Single Age
13WPY06_19	585.00	44.50	0.45600	0.01400	0.05649	0.00079	0.49572	381.0	9.6	354.2	4.8	495	59	354.2	4.8	7.0	Rim
13WPY06_19	203.00	4.30	0.74600	0.01600	0.09220	0.00150	0.65058	565.8	9.4	568.2	8.6	564	34	568.2	8.6	0.4	Core
13WPY06_20	1313.00	43.70	0.34870	0.00520	0.04802	0.00078	0.69918	303.6	3.9	302.3	4.8	295	28	302.3	4.8	0.4	Rim
13WPY06_20	90.80	1.18	0.84700	0.02500	0.10330	0.00200	0.36827	623.0	14.0	634.0	12.0	595	66	634.0	12.0	1.8	Core
13WPY06_21	986.00	41.60	0.41100	0.01800	0.05510	0.00170	0.90981	349.0	13.0	346.0	11.0	367	45	346.0	11.0	0.9	Rim
13WPY06_21	427.00	5.42	0.78700	0.02500	0.09640	0.00300	0.91844	589.0	14.0	593.0	18.0	594	27	593.0	18.0	0.7	Core
13WPY06_22	119.20	0.73	1.37400	0.02100	0.14470	0.00220	0.62087	877.6	8.8	871.0	12.0	911	26	871.0	12.0	0.8	Single Age
13WPY06_23	303.00	11.80	0.52600	0.01300	0.06810	0.00140	0.63700	428.8	8.7	424.7	8.6	480	40	424.7	8.6	1.0	Rim
13WPY06_23	68.90	1.74	0.82500	0.02600	0.10050	0.00160	0.65571	610.0	14.0	617.5	9.7	566	49	617.5	9.7	1.2	Core
13WPY06_24	35.00	1.08	0.99700	0.02400	0.11620	0.00160	0.14474	703.0	12.0	708.3	9.5	697	51	708.3	9.5	0.8	Single Age
13WPY06_25	559.00	9.48	0.50940	0.00530	0.06717	0.00058	0.62787	417.9	3.5	419.0	3.5	426	17	419.0	3.5	0.3	Single Age
13WPY06_26	200.00	1.70	0.74000	0.06900	0.07780	0.00300	0.50580	559.0	38.0	483.0	18.0	910	130	DISC	DISC	13.6	Rim

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY06_26	21.20	0.41	1.89700	0.06800	0.19080	0.00690	0.51939	1079.0	24.0	1125.0	37.0	1022	90	1125.0	37.0	4.3	Core
13WPY06_27	87.00	90.00	0.90900	0.02800	0.10360	0.00150	0.23888	655.0	15.0	635.2	8.6	722	63	635.2	8.6	3.0	Single Age
13WPY06_28	220.00	0.97	0.71570	0.00720	0.08704	0.00074	0.40244	548.0	4.3	538.0	4.4	583	21	538.0	4.4	1.8	Single Age
13WPY06_29	58.70	1.72	0.94100	0.01500	0.11110	0.00130	0.19599	673.1	7.9	678.9	7.3	648	37	678.9	7.3	0.9	Single Age
13WPY06_30	180.00	2.56	5.36400	0.09900	0.32790	0.00540	0.91613	1880.0	16.0	1833.0	28.0	1930	14	1930.0	14.0	5.0	Single Age
13WPY06_31	280.00	4.69	9.63000	0.16000	0.43520	0.00450	0.81772	2398.0	15.0	2329.0	20.0	2465	16	2465.0	16.0	5.5	Single Age
13WPY06_32	252.00	0.75	1.75300	0.02100	0.17370	0.00180	0.81265	1027.7	7.6	1032.5	9.7	997	16	1032.5	9.7	0.5	Single Age
13WPY06_33	59.80	1.10	1.86400	0.02200	0.18140	0.00190	0.25435	1068.9	7.9	1074.0	10.0	1044	26	1074.0	10.0	0.5	Single Age
13WPY06_36	77.40	0.77	7.35000	0.18000	0.36880	0.00580	0.53099	2152.0	22.0	2023.0	27.0	2290	29	2290.0	29.0	11.7	Single Age
13WPY06_37	185.40	1.31	10.74000	0.11000	0.46030	0.00350	0.74981	2500.5	9.1	2440.0	15.0	2553	11	2553.0	11.0	4.4	Single Age
13WPY06_38	204.00	3.30	0.73200	0.04800	0.08780	0.00300	0.58470	544.0	22.0	545.0	17.0	562	42	545.0	17.0	0.2	Single Age
13WPY06_39	67.30	1.32	11.61000	0.11000	0.50210	0.00620	0.92066	2572.6	8.5	2622.0	26.0	2531	14	2531.0	14.0	3.6	Single Age
13WPY06_40	285.20	29.00	0.35900	0.01300	0.04870	0.00100	0.07197	311.2	9.6	306.2	6.2	340	91	306.2	6.2	1.6	Rim
13WPY06_40	117.10	1.49	1.41500	0.01900	0.14830	0.00210	0.43604	895.0	7.9	892.0	12.0	884	31	892.0	12.0	0.3	Core
13WPY06_41	191.00	1.16	1.17400	0.01700	0.12510	0.00160	0.58068	787.9	8.1	759.8	9.3	887	27	759.8	9.3	3.6	Single Age
13WPY06_42	636.00	31.00	0.33500	0.00930	0.04570	0.00130	0.88677	293.1	7.0	287.8	8.0	334	32	287.8	8.0	1.8	Rim
13WPY06_42	38.90	0.92	0.80400	0.03100	0.09960	0.00130	0.13989	599.0	18.0	611.8	7.4	535	86	611.8	7.4	2.1	Core
13WPY06_43	137.40	1.32	12.40000	0.13000	0.50210	0.00440	0.85161	2634.3	9.9	2622.0	19.0	2653	10	2653.0	9.6	1.2	Single Age
13WPY06_44	178.10	2.30	0.99100	0.01900	0.11360	0.00150	0.74907	698.5	9.4	694.7	8.4	717	25	694.7	8.4	0.5	Single Age
13WPY06_45	202.00	18.70	0.38750	0.00830	0.05315	0.00090	0.57888	332.2	6.0	333.8	5.5	318	41	333.8	5.5	0.5	Single Age
13WPY06_46	425.00	61.30	0.38300	0.01400	0.05144	0.00075	0.03070	329.0	10.0	323.4	4.6	367	76	323.4	4.6	1.7	Rim
13WPY06_46	253.00	2.95	0.61600	0.01400	0.07880	0.00190	0.85395	486.9	9.1	489.0	11.0	473	26	489.0	11.0	0.4	Core
13WPY06_47	435.80	1.75	0.44650	0.00430	0.05971	0.00055	0.33225	374.7	3.0	373.8	3.3	384	26	373.8	3.3	0.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY06_48	251.00	1.23	1.60000	0.03300	0.16290	0.00270	0.92884	969.0	13.0	973.0	15.0	967	17	973.0	15.0	0.4	Single Age
13WPY06_49	70.60	1.58	0.81200	0.01400	0.09720	0.00120	0.52831	605.0	8.0	597.7	7.2	599	36	597.7	7.2	1.2	Single Age
13WPY06_50	382.00	8.50	11.25000	0.11000	0.50220	0.00430	0.82952	2546.0	9.0	2623.0	19.0	2484	11	2484.0	11.0	5.6	Single Age
13WPY06_51	672.00	5.99	0.37260	0.00610	0.05115	0.00090	0.52039	322.8	5.0	321.6	5.5	343	34	321.6	5.5	0.4	Rim
13WPY06_51	268.60	7.03	1.09300	0.03100	0.07740	0.00120	0.66575	749.0	15.0	480.6	7.4	1672	38	DISC	DISC	35.8	Core
13WPY06_52	1860.00	33.20	0.36250	0.00510	0.04640	0.00170	0.03123	314.1	3.8	292.0	11.0	483	92	292.0	11.0	7.0	Rim
13WPY06_52	106.40	0.61	0.87300	0.01300	0.10520	0.00130	0.57544	638.2	6.6	644.8	7.9	588	31	644.8	7.9	1.0	Core
13WPY06_53	1043.00	17.90	0.37200	0.01400	0.04980	0.00130	0.87411	321.0	10.0	313.5	8.1	358	43	313.5	8.1	2.3	Rim
13WPY06_53	536.00	5.26	0.84000	0.01300	0.09140	0.00130	0.77155	619.1	7.2	564.0	7.9	825	21	564.0	7.9	8.9	Core
13WPY06_54	680.00	31.60	0.35400	0.02000	0.04710	0.00420	0.48721	307.0	15.0	296.0	26.0	380	170	296.0	26.0	3.6	Rim
13WPY06_54	68.80	1.55	0.83100	0.01400	0.10190	0.00140	0.35164	613.9	7.9	625.4	8.5	556	38	625.4	8.5	1.9	Core
13WPY06_55	682.00	69.60	0.35800	0.00590	0.04925	0.00069	0.66509	310.6	4.4	309.9	4.3	298	27	309.9	4.3	0.2	Single Age
13WPY06_56	99.80	4.68	9.08000	0.12000	0.41710	0.00490	0.82370	2347.0	12.0	2250.0	22.0	2423	11	2423.0	11.0	7.1	Single Age
13WPY06_57	631.00	2.40	1.78900	0.01500	0.17570	0.00150	0.77845	1041.2	5.4	1045.2	7.9	1031	12	1045.2	7.9	0.4	Single Age
13WPY06_58	277.00	2.10	0.49900	0.02400	0.06485	0.00096	0.60824	411.0	16.0	405.1	5.8	459	78	405.1	5.8	1.4	Rim
13WPY06_58	72.30	0.54	0.80100	0.01700	0.09990	0.00140	0.49246	597.1	9.6	613.6	8.5	520	39	613.6	8.5	2.8	Core
13WPY06_59	1650.00	34.20	0.35120	0.00420	0.04687	0.00051	0.70712	305.5	3.2	295.3	3.2	396	20	295.3	3.2	3.3	Single Age
13WPY06_60	578.00	53.00	0.40900	0.01500	0.05500	0.00180	0.86592	348.0	10.0	345.0	11.0	386	40	345.0	11.0	0.9	Rim
13WPY06_60	206.00	0.73	0.87800	0.01100	0.10550	0.00130	0.10882	639.9	6.2	646.7	7.8	611	32	646.7	7.8	1.1	Core
13WPY06_61	81.00	2.18	0.97300	0.01400	0.11160	0.00130	0.31770	689.7	7.1	681.9	7.8	693	35	681.9	7.8	1.1	Single Age
13WPY06_62	500.00	12.60	0.40280	0.00540	0.05447	0.00060	0.58523	343.5	3.9	341.9	3.7	346	23	341.9	3.7	0.5	Single Age
13WPY06_63	208.80	1.02	1.75400	0.02200	0.16790	0.00190	0.73571	1027.9	8.2	1000.0	10.0	1075	17	1000.0	10.0	2.7	Single Age
13WPY06_64	172.50	1.70	0.74500	0.01100	0.08990	0.00110	0.74435	564.9	6.4	555.1	6.7	594	26	555.1	6.7	1.7	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY06_65	294.30	0.77	1.30500	0.01500	0.14050	0.00170	0.67656	847.5	6.8	847.4	9.5	843	22	847.4	9.5	0.0	Single Age
13WPY06_66	106.20	1.04	5.58000	0.07600	0.33250	0.00430	0.86045	1912.0	12.0	1850.0	21.0	1971	11	1971.0	11.0	6.1	Single Age
13WPY06_67	949.00	1.60	0.38230	0.00580	0.04917	0.00053	0.46653	328.6	4.2	309.4	3.3	457	21	309.4	3.3	5.8	Single Age
13WPY06_68	458.00	0.85	1.21000	0.01100	0.12920	0.00100	0.68829	805.8	5.0	783.0	5.9	872	14	783.0	5.9	2.8	Single Age
13WPY06_69	107.10	1.40	1.39000	0.01700	0.14590	0.00170	0.56311	884.6	7.4	877.7	9.4	911	24	877.7	9.4	0.8	Single Age
13WPY06_70	286.00	1.44	0.45400	0.02400	0.05750	0.00300	0.76553	379.0	16.0	360.0	19.0	470	56	360.0	19.0	5.0	Rim
13WPY06_70	78.00	0.24	0.80700	0.01700	0.09810	0.00150	0.37097	600.3	9.6	603.2	8.6	604	49	603.2	8.6	0.5	Core
13WPY06_71	121.80	0.83	5.84900	0.04800	0.34980	0.00270	0.40508	1953.3	7.2	1933.0	13.0	1972	13	1972.0	13.0	2.0	Single Age
13WPY06_72	253.00	1.22	0.88100	0.01900	0.09300	0.00220	0.81749	642.4	9.9	573.0	13.0	917	30	DISC	DISC	10.8	Single Age
13WPY06_73	343.60	0.92	9.39000	0.11000	0.39450	0.00410	0.81350	2377.0	11.0	2143.0	19.0	2582	12	2582.0	12.0	17.0	Single Age
13WPY06_74	326.20	2.46	5.90000	0.12000	0.34400	0.00650	0.85655	1965.0	16.0	1905.0	31.0	2016	20	2016.0	20.0	5.5	Rim
13WPY06_74	326.50	2.33	14.66000	0.23000	0.52900	0.00680	0.77157	2792.0	15.0	2737.0	28.0	2819	17	2819.0	17.0	2.9	Core
13WPY06_75	490.00	10.83	1.66800	0.01100	0.16520	0.00130	0.78619	996.3	4.3	985.5	7.4	1018	12	985.5	7.4	1.1	Single Age
13WPY06_76	71.30	1.46	5.09300	0.05200	0.30050	0.00310	0.46535	1834.4	8.7	1694.0	15.0	1991	19	1991.0	19.0	14.9	Single Age
13WPY06_77	3900.00	112.70	0.32680	0.00760	0.04190	0.00100	0.90382	286.8	5.8	264.8	6.2	453	23	264.8	6.2	7.7	Single Age
13WPY06_78	334.00	140.00	0.34990	0.00830	0.04840	0.00110	0.68643	304.5	6.2	304.5	6.7	295	43	304.5	6.7	0.0	Rim
13WPY06_78	378.00	1.56	1.07500	0.02300	0.11840	0.00270	0.51155	741.0	11.0	721.0	16.0	787	42	721.0	16.0	2.7	Core
13WPY06_79	120.00	1.77	1.25100	0.01500	0.13590	0.00140	0.76930	824.6	7.1	821.1	7.9	820	24	821.1	7.9	0.4	Single Age
13WPY06_80	355.00	1.93	0.81810	0.00990	0.09650	0.00120	0.77748	606.7	5.6	593.9	6.9	637	18	593.9	6.9	2.1	Single Age
13WPY06_81	337.00	7.50	0.56700	0.02900	0.07290	0.00320	0.91295	455.0	18.0	453.0	19.0	484	60	453.0	19.0	0.4	Single Age
13WPY06_82	187.00	0.58	0.81500	0.01300	0.09780	0.00110	0.34863	606.3	6.7	601.2	6.7	610	36	601.2	6.7	0.8	Single Age
13WPY06_83	866.00	2.31	0.37760	0.00510	0.04644	0.00071	0.44607	325.1	3.8	292.6	4.4	566	33	292.6	4.4	10.0	Single Age
13WPY06_84	476.00	33.00	0.35170	0.00650	0.04800	0.00059	0.82231	305.8	4.9	302.2	3.6	331	26	302.2	3.6	1.2	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY06_85	733.00	1.99	0.90200	0.01300	0.10390	0.00140	0.87968	652.2	7.0	637.0	8.1	701	15	637.0	8.1	2.3	Single Age
13WPY06_86	379.00	1.96	0.61240	0.00650	0.07722	0.00069	0.54965	484.9	4.1	479.5	4.1	529	21	479.5	4.1	1.1	Single Age
13WPY06_87	251.20	3.83	0.61600	0.01800	0.07310	0.00180	0.87188	487.0	11.0	455.0	11.0	655	42	455.0	11.0	6.6	Rim
13WPY06_87	105.00	1.08	0.97700	0.02300	0.10800	0.00190	0.66568	691.0	12.0	661.0	11.0	779	38	661.0	11.0	4.3	Core
13WPY06_88	322.00	0.23	1.15700	0.01500	0.12800	0.00130	0.62029	780.2	7.0	776.3	7.3	816	22	776.3	7.3	0.5	Single Age
13WPY06_89	871.00	13.60	1.02700	0.01100	0.11730	0.00120	0.85478	717.0	5.8	714.7	7.1	741	15	714.7	7.1	0.3	Single Age
13WPY06_90	73.70	2.47	0.91900	0.02600	0.10560	0.00140	0.47174	660.0	13.0	647.2	8.1	706	52	647.2	8.1	1.9	Single Age
13WPY06_91	304.00	1.52	0.39870	0.00670	0.05454	0.00087	0.69382	340.5	4.8	342.3	5.3	340	31	342.3	5.3	0.5	Single Age
13WPY06_92	34.56	0.31	1.53600	0.04300	0.15580	0.00250	0.47195	943.0	17.0	933.0	14.0	963	54	933.0	14.0	1.1	Single Age
13WPY06_93	773.00	1.87	5.48600	0.08300	0.31800	0.00500	0.94593	1897.0	13.0	1779.0	25.0	2028	12	2028.0	12.0	12.3	Single Age
13WPY06_94	262.00	1.64	0.95600	0.01500	0.11150	0.00130	0.47990	680.9	7.9	681.7	7.6	674	27	681.7	7.6	0.1	Single Age
13WPY06_95	228.00	3.09	0.75100	0.01100	0.09190	0.00110	0.39054	568.3	6.3	566.5	6.5	589	30	566.5	6.5	0.3	Single Age
13WPY06_96	211.00	0.68	5.11800	0.07700	0.32040	0.00450	0.90760	1841.0	12.0	1791.0	22.0	1881	15	1881.0	15.0	4.8	Single Age
13WPY06_97	137.10	1.48	6.15100	0.05000	0.35320	0.00320	0.65868	1997.1	7.1	1950.0	15.0	2054	14	2054.0	14.0	5.1	Single Age
13WPY06_98	800.00	7.60	0.40900	0.01700	0.05290	0.00180	0.89844	351.0	13.0	332.0	11.0	475	45	332.0	11.0	5.4	Rim
13WPY06_98	131.60	1.58	0.59950	0.00810	0.07736	0.00093	0.44206	476.8	5.1	480.3	5.5	484	32	480.3	5.5	0.7	Core
13WPY06_99	210.00	0.99	5.95600	0.06300	0.35570	0.00320	0.88850	1970.3	8.8	1962.0	15.0	1979	9	1979.0	8.5	0.9	Single Age
13WPY06_100	765.00	1.22	0.76570	0.00910	0.09220	0.00110	0.84582	577.1	5.3	568.6	6.4	606	15	568.6	6.4	1.5	Single Age
13WPY06_101	122.30	0.47	1.77800	0.02700	0.16490	0.00130	0.01704	1038.0	10.0	983.9	7.1	1147	35	983.9	7.1	5.2	Single Age
13WPY06_102	353.00	1.91	0.56350	0.00640	0.07263	0.00073	0.49851	453.7	4.2	452.0	4.4	471	23	452.0	4.4	0.4	Single Age
13WPY06_103	48.70	0.71	0.90000	0.03200	0.10910	0.00290	0.41226	655.0	15.0	667.0	17.0	646	67	667.0	17.0	1.8	Single Age
13WPY06_104	503.00	1.03	3.96600	0.03900	0.27330	0.00300	0.74204	1626.8	7.9	1557.0	15.0	1716	13	1716.0	13.0	9.3	Single Age
13WPY06_105	152.10	2.58	0.75250	0.00970	0.09074	0.00096	0.20163	570.2	5.5	559.9	5.7	603	32	559.9	5.7	1.8	Single Age

Sample_ Grain #	[U] ppm (approx.)	U/Th	207/235	2σ error	206/238	2σ error	RHO	207/235 Age (Ma)	2σ error	206/238 Age (Ma)	2σ error	207/206 Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance	Rim/Core
13WPY06_106	515.00	1.21	4.92100	0.03200	0.32320	0.00240	0.68505	1805.6	5.5	1805.0	12.0	1798	11	1798.0	11.0	0.4	Single Age
13WPY06_107	156.60	0.75	1.58100	0.02800	0.15840	0.00210	0.69969	964.0	11.0	950.0	12.0	1003	28	950.0	12.0	1.5	Single Age
13WPY06_108	554.00	0.89	0.81000	0.00680	0.09665	0.00086	0.64410	602.3	3.8	594.7	5.1	626	16	594.7	5.1	1.3	Single Age
13WPY06_109	587.00	1.73	0.40330	0.00580	0.05373	0.00068	0.44581	344.4	4.1	337.4	4.2	380	30	337.4	4.2	2.0	Single Age
13WPY06_110	520.00	19.60	0.37200	0.01300	0.05210	0.00260	0.86846	321.0	10.0	327.0	16.0	278	63	327.0	16.0	1.9	Rim
13WPY06_110	383.00	1.43	1.15400	0.03500	0.11640	0.00210	0.82921	782.0	15.0	710.0	12.0	982	40	710.0	12.0	9.2	Core
13WPY06_111	952.00	4.39	0.33450	0.00740	0.04250	0.00130	0.89995	293.4	5.7	268.2	7.8	523	28	268.2	7.8	8.6	Single Age
13WPY06_112	1150.00	9.99	0.41250	0.00850	0.05520	0.00100	0.82748	350.6	6.0	346.4	6.3	383	31	346.4	6.3	1.2	Rim
13WPY06_112	260.00	3.13	4.79000	0.21000	0.27500	0.01100	0.97933	1779.0	36.0	1563.0	57.0	2045	17	2045.0	17.0	23.6	Core
13WPY06_113	489.00	3.19	0.54260	0.00520	0.07026	0.00067	0.68806	440.0	3.5	437.7	4.1	457	18	437.7	4.1	0.5	Single Age
13WPY06_114	354.00	77.00	0.59300	0.01100	0.07549	0.00095	0.60077	472.1	6.8	470.0	5.5	492	30	470.0	5.5	0.4	Single Age
13WPY06_115	85.70	1.02	1.63400	0.02500	0.16100	0.00200	0.37488	984.2	9.4	962.0	11.0	1014	28	962.0	11.0	2.3	Single Age
13WPY06_116	147.70	0.87	1.22800	0.02200	0.12920	0.00210	0.71772	813.9	9.6	785.0	12.0	876	25	785.0	12.0	3.6	Single Age
13WPY06_117	485.00	1.40	3.58000	0.07300	0.22610	0.00510	0.77611	1545.0	16.0	1322.0	30.0	1884	31	1884.0	31.0	29.8	Rim
13WPY06_117	84.80	0.73	6.30800	0.08500	0.36560	0.00460	0.76343	2019.0	12.0	2008.0	22.0	2033	16	2033.0	16.0	1.2	Core
13WPY06_118	134.90	1.50	0.57460	0.00890	0.07383	0.00082	0.76164	460.7	5.7	459.2	5.0	459	29	459.2	5.0	0.3	Single Age
13WPY06_119	77.00	0.58	0.74500	0.01300	0.09030	0.00140	0.31819	565.2	7.8	557.1	8.3	632	43	557.1	8.3	1.4	Single Age
13WPY06_120	400.00	29.60	0.34710	0.00460	0.04811	0.00046	0.08409	302.4	3.5	302.9	2.8	283	29	302.9	2.8	0.2	Single Age
13WPY06_121	177.90	0.68	1.28300	0.02000	0.13250	0.00200	0.74666	837.8	9.0	802.0	11.0	926	23	802.0	11.0	4.3	Single Age
13WPY06_122	2012.00	6.39	0.33410	0.00350	0.04594	0.00035	0.79035	292.6	2.7	289.5	2.2	305	18	289.5	2.2	1.1	Single Age
13WPY06_123	159.40	1.29	0.71700	0.01000	0.08892	0.00093	0.28276	549.6	6.1	549.1	5.5	555	34	549.1	5.5	0.1	Single Age
13WPY06_124	1040.00	36.60	0.35800	0.01000	0.04900	0.00130	0.79949	310.8	7.6	308.2	7.9	337	33	308.2	7.9	0.8	Rim
13WPY06_124	53.90	0.68	4.95200	0.08700	0.30950	0.00460	0.58545	1811.0	15.0	1738.0	23.0	1912	31	1912.0	31.0	9.1	Core

Appendix B

Mauléon Basin sample locations

Sample	Latitude (N)	Longitude (E)	Elevation (m)
12WPY05	43°13'50.0''	01°18'06.7"	113
12WPY06	43°13'04.8''	01°19'24.6"	268
12WPY10	43°21'11.9''	01°20'11.8"	379
12WPY11	43°21'36.9''	01°19'30.8"	274
12WPY12	43°20'18.8''	01°19'52.8"	430
12WPY13	43°21'48.66"	01°17'32.33"	103
12WPY18	43°18'54.5''	01°15'35.7"	203
12WPY19	43°11'59.4''	01°17'30.7"	807
12WPY21	43°02'24.3''	01°01'39.2"	1363
12WPY23	43°02'41.5''	01°01'25.5"	1221
12WPY24	43°03'04.4''	01°00'55.9"	1169
12WPY25	43°03'31.1''	01°01'08.3"	1180
12WPY26	43°04'08.0''	01°01'19.8"	1035
12WPY28	43°04'20.5''	01°01'12.0"	900
12WPY30	43°09'01.3''	01°17'16.6"	373
12WPY31	43°09'02.0''	01°17'38.8"	467
12WPY32	43°08'52.2''	01°17'44.6"	538
12WPY33	43°08'29.3''	01°17'30.5"	744
12WPY35	43°08'21.4''	01°17'48.7"	806
12WPY36	43°08'27.4''	01°18'06.5"	903
12WPY38	43°07'56.2''	01°19'06.3"	902
12WPY41	43°17'28.2''	01°17'31.9"	881
12WPY43	43°17'51.6''	01°17'47.8"	596
12WPY45	43°15'26.2''	01°19'09.3"	96
12WPY47	43°16'34.5''	01°19'02.2"	316
12WPY48	43°19'37.6''	01°23'21.7"	67
12WPY54	43°20'55.6''	01°14'15.3"	153
12WPY55	43°20'20.1''	01°14'36.2"	466
12WPY59	43°12'49.8''	01°07'55.1"	199
13WPY04	43°07'44.9''	01°19'41.6"	939
13WPY06	43°21'40.1''	01°14'12.4"	178
13WPY07	43°20'39.5''	01°19'56.3"	666

Mendibelza zircon (U-Th)/He data

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	Mass (ug)	Ft	ESR
12WPY21-9	85.8	6.86	204.0	27.7	1.0	210.4	0.14	73.7	4.97	0.75	46.26
12WPY21-11	61.1	4.88	139.4	26.8	0.4	145.6	0.19	37.4	5.78	0.78	51.57
12WPY21-24	88.2	7.06	204.4	45.2	0.3	214.8	0.22	79.3	5.85	0.77	50.55
12WPY21-69	55.4	4.43	462.6	257.4	1.5	521.9	0.56	128.6	12.86	0.82	66.76
12WPY21-90	78.2	6.26	185.9	33.6	1.0	193.7	0.18	63.6	6.48	0.77	51.19
12WPY21-108	65.3	5.23	536.1	194.4	1.8	580.9	0.36	144.4	2.44	0.70	38.19
12WPY21-109	46.8	3.75	156.3	25.5	2.8	162.2	0.16	31.1	4.31	0.76	46.98
12WPY21-122	70.9	5.67	228.5	66.3	0.7	243.7	0.29	76.3	11.61	0.81	63.60
12WPY21-123	80.8	6.46	197.2	23.4	0.5	202.6	0.12	67.4	4.97	0.76	47.64
12WPY23-15	72.7	5.82	339.7	83.2	1.4	358.8	0.24	116.6	11.58	0.82	67.07
12WPY23-19	52.7	4.22	29.9	12.5	0.8	32.8	0.42	7.5	8.00	0.80	59.79
12WPY23-42	59.2	4.74	268.7	173.7	1.2	308.7	0.65	75.7	4.62	0.76	49.79
12WPY23-95	54.8	4.39	491.1	68.8	2.2	507.0	0.14	119.4	8.33	0.79	56.15
12WPY23-115	132.8	10.63	421.2	87.8	0.8	441.4	0.21	253.8	7.64	0.80	56.87
12WPY23-116	48.7	3.90	353.7	71.1	1.7	370.0	0.20	79.5	9.44	0.81	63.20
12WPY23-117	103.6	8.29	165.6	34.9	1.1	173.7	0.21	74.1	4.71	0.76	47.59
12WPY23-125	129.5	10.36	223.2	26.3	0.7	229.3	0.12	129.7	9.15	0.80	58.82
12WPY24-1	36.8	2.21	71.0	39.0	1.0	80.0	0.55	11.3	2.73	0.71	39.71
12WPY24-10	62.8	3.77	263.1	59.2	0.7	276.8	0.22	75.2	8.49	0.80	58.07
12WPY24-11	52.9	3.17	111.8	37.0	0.7	120.3	0.33	25.9	4.26	0.75	46.76
12WPY24-13	63.6	3.81	156.6	47.4	0.5	167.5	0.30	45.7	7.11	0.79	56.54
12WPY24-29	31.2	1.87	156.3	21.5	0.2	161.2	0.14	20.5	3.83	0.75	46.33

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	Mass (ug)	Ft	ESR
12WPY24-30	53.2	3.19	251.7	12.0	0.2	254.5	0.05	51.9	2.10	0.71	38.21
12WPY24-31	38.2	2.29	368.1	133.8	0.6	398.9	0.36	63.9	5.31	0.77	51.96
12WPY24-34	72.4	4.35	116.4	52.9	1.2	128.6	0.45	36.7	3.58	0.73	42.13
12WPY24-49	27.9	1.67	249.8	40.9	1.1	259.2	0.16	28.6	3.00	0.73	42.46
12WPY24-50	97.1	5.82	178.6	74.3	0.6	195.7	0.42	75.4	3.60	0.73	42.82
12WPY24-58	54.1	3.24	99.0	64.4	2.2	113.8	0.65	25.1	4.38	0.75	47.67
12WPY24-64	43.8	2.63	151.4	49.7	0.5	162.9	0.33	26.3	1.71	0.68	35.21
12WPY24-67	49.8	2.99	138.9	59.1	0.4	152.5	0.43	29.7	2.81	0.72	41.55
12WPY24-74	30.6	1.84	69.4	47.3	0.6	80.3	0.68	9.8	3.34	0.74	44.76
12WPY24-78	36.7	2.20	238.7	146.8	0.6	272.5	0.62	35.9	1.41	0.66	33.61
12WPY24-83	67.6	4.06	73.9	33.3	0.7	81.6	0.45	21.7	2.75	0.73	41.96
12WPY24-90	46.9	2.81	127.8	34.9	0.6	135.9	0.27	23.9	2.13	0.69	36.63
12WPY24-108	40.8	2.45	65.1	36.6	0.8	73.5	0.56	11.8	3.29	0.72	42.09
12WPY24-109	51.3	3.08	77.5	88.5	0.9	97.9	1.14	19.2	2.66	0.70	39.42
12WPY24-119	69.3	4.16	83.0	28.5	1.0	89.5	0.34	26.7	7.23	0.79	56.92
12WPY24-125	46.3	2.78	139.1	41.0	0.5	148.5	0.29	25.5	2.16	0.68	35.67
12WPY25-3	60.8	4.86	196.1	148.4	0.7	230.3	0.76	59.3	6.00	0.78	54.36
12WPY25-11	83.0	6.64	42.2	31.6	1.7	49.5	0.75	15.9	2.90	0.71	40.27
12WPY25-13	47.1	3.77	131.6	127.5	1.5	161.0	0.97	31.4	5.26	0.76	50.35
12WPY25-29	77.1	6.16	71.0	44.1	1.4	81.2	0.62	26.0	5.49	0.77	50.50
12WPY25-37	60.9	4.87	141.7	80.8	2.5	160.3	0.57	38.7	3.25	0.73	43.19
12WPY25-41	39.1	3.13	153.0	42.0	0.6	162.7	0.27	25.7	3.70	0.75	45.67
12WPY25-47	60.2	4.81	140.1	44.8	0.6	150.4	0.32	38.2	5.98	0.78	52.75
12WPY25-52	50.1	4.01	685.9	172.2	2.7	725.5	0.25	142.4	3.39	0.72	41.31

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	Mass (ug)	Ft	ESR
12WPY25-101	62.9	5.04	85.8	39.6	0.6	94.9	0.46	25.0	6.29	0.77	51.49
12WPY26-29	80.2	6.41	148.6	36.5	0.7	157.1	0.25	56.3	12.89	0.82	67.26
12WPY26-36	94.6	7.57	323.2	90.0	0.8	343.9	0.28	135.4	5.66	0.77	49.58
12WPY26-59	44.3	3.54	356.5	75.7	1.2	373.9	0.21	69.5	5.50	0.78	51.88
12WPY26-65	60.6	4.85	151.2	61.3	0.7	165.3	0.41	44.8	14.44	0.83	68.20
12WPY26-75	47.6	3.80	370.9	101.3	1.0	394.3	0.27	76.3	4.35	0.75	46.47
12WPY26-96	76.3	6.10	47.6	65.0	0.9	62.6	1.37	19.7	4.94	0.76	49.23
12WPY26-106	49.8	3.99	39.4	20.7	1.6	44.2	0.53	9.1	5.18	0.76	49.29
12WPY26-122	104.2	8.34	221.6	85.9	0.9	241.4	0.39	104.2	5.41	0.76	48.95
12WPY26-123	82.1	6.57	172.0	68.2	0.6	187.7	0.40	62.2	4.33	0.74	45.20
12WPY28-1	49.4	2.96	204.9	86.9	0.7	224.9	0.42	43.9	3.02	0.73	42.66
12WPY28-5	45.5	2.73	208.5	128.6	1.1	238.1	0.62	41.9	2.76	0.71	40.36
12WPY28-20	37.6	2.25	118.6	74.8	1.2	135.8	0.63	19.3	2.26	0.70	38.23
12WPY28-26	38.3	2.30	158.2	48.3	2.4	169.4	0.30	26.7	4.32	0.76	48.78
12WPY28-37	42.8	2.57	233.7	83.6	0.7	253.0	0.36	41.8	2.69	0.71	39.93
12WPY28-39	50.3	3.02	135.1	53.9	1.2	147.5	0.40	30.9	5.01	0.77	50.48
12WPY28-47	63.7	3.82	13.0	4.2	1.9	14.0	0.33	3.5	2.59	0.72	40.58
12WPY28-68	42.5	2.55	178.9	94.1	1.3	200.6	0.53	29.9	1.54	0.65	31.72
12WPY28-71	32.4	1.94	143.7	66.9	1.7	159.1	0.47	20.1	2.80	0.72	41.56
12WPY28-78	33.5	2.01	126.9	97.1	1.9	149.2	0.77	19.1	2.26	0.70	39.18
12WPY28-82	30.9	1.85	37.8	29.1	0.7	44.5	0.77	5.7	5.65	0.77	51.75
12WPY28-84	32.7	1.96	399.1	204.6	3.2	446.2	0.51	54.5	2.38	0.69	36.94
12WPY28-98	45.9	2.75	132.5	62.3	0.6	146.9	0.47	25.9	2.38	0.71	39.56
12WPY28-99	49.0	2.94	394.8	138.9	1.8	426.8	0.35	85.1	4.16	0.75	46.65

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	Mass (ug)	Ft	ESR
12WPY28-103	81.2	4.87	231.5	93.1	0.7	252.9	0.40	83.4	4.31	0.75	46.13
12WPY28-105	31.3	1.88	272.2	102.3	2.4	295.7	0.38	33.4	1.57	0.67	33.56
12WPY28-109	42.5	2.55	331.2	41.9	0.6	340.9	0.13	54.4	2.04	0.69	36.42
12WPY28-115	32.0	1.92	164.9	106.8	5.8	189.5	0.65	24.0	3.19	0.73	43.09
12WPY28-116	29.5	1.77	112.9	35.1	0.7	121.0	0.31	13.8	2.58	0.71	39.91
12WPY28-120	41.2	2.47	202.8	36.6	0.8	211.3	0.18	34.5	3.80	0.73	42.30
12WPY28-121	80.8	4.85	171.1	120.0	0.9	198.8	0.70	58.7	2.61	0.67	34.97

Mt. Monoa zircon (U-Th)/He data

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY30-2	127.2	7.63	429.0	35.5	0.9	437.2	0.08	231.3	5.10	0.76	48.46
12WPY30-9	133.5	8.01	96.6	81.6	1.1	115.4	0.84	58.1	2.08	0.69	37.45
12WPY31-11	84.0	6.72	257.2	94.7	0.4	279.0	0.37	95.2	3.69	0.75	46.06
12WPY30-17	69.4	4.16	674.2	233.3	5.0	728.0	0.35	216.6	8.94	0.79	56.20
12WPY30-20	115.0	6.90	166.9	145.7	1.3	200.5	0.87	92.5	3.61	0.74	44.75
12WPY30-26	166.8	10.01	103.1	84.6	3.5	122.6	0.82	76.4	2.09	0.68	36.54
12WPY30-28	118.2	7.09	112.6	112.6	1.3	138.5	1.00	66.2	3.73	0.74	45.97
12WPY30-31	146.5	8.79	121.9	170.2	4.5	161.1	1.40	92.8	2.88	0.72	42.16
12WPY30-34	177.2	10.63	42.3	63.0	1.0	56.8	1.49	41.2	4.33	0.75	47.56
12WPY30-37	124.4	7.46	415.1	128.7	3.1	444.8	0.31	230.4	4.91	0.77	49.51
12WPY30-54	142.6	8.55	121.7	47.2	1.0	132.6	0.39	76.6	3.93	0.74	45.23
12WPY30-61	126.8	7.61	52.9	47.7	0.7	63.9	0.90	32.9	4.39	0.75	46.53
12WPY30-66	192.7	11.56	312.5	66.5	1.1	327.8	0.21	259.8	4.41	0.75	46.33
12WPY30-69	49.5	2.97	719.3	213.3	3.2	768.5	0.30	154.3	3.98	0.75	45.94
12WPY30-90	76.4	4.59	250.4	99.8	1.6	273.4	0.40	85.2	4.00	0.75	46.75
12WPY30-95	115.6	6.94	199.5	41.5	1.3	209.0	0.21	95.7	3.72	0.73	41.94
12WPY30-105	49.2	2.95	113.1	50.9	0.7	124.8	0.45	25.7	5.16	0.77	51.57
12WPY30-110	136.7	8.20	292.1	111.8	5.4	317.9	0.38	192.0	9.41	0.81	62.42
12WPY30-112	97.4	5.84	83.8	20.6	2.8	88.6	0.25	33.9	2.90	0.72	41.35
12WPY30-113	140.6	8.44	64.5	50.9	1.0	76.3	0.79	42.1	2.84	0.72	41.59
12WPY30-117	92.7	5.56	349.1	105.9	1.1	373.5	0.30	132.7	2.28	0.71	38.59
12WPY30-119	108.2	6.49	330.9	126.1	0.7	359.9	0.38	143.4	1.78	0.68	35.01
12WPY31-8	95.6	7.65	219.6	83.0	1.5	238.7	0.38	88.5	2.55	0.71	40.04

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY31-9	84.4	6.76	103.0	17.0	1.0	106.9	0.16	35.1	2.48	0.72	39.78
12WPY31-13	83.2	6.66	64.1	32.1	0.5	71.5	0.50	23.1	2.50	0.72	40.51
12WPY31-17	85.4	6.83	31.2	20.1	0.5	35.8	0.65	13.0	6.19	0.78	54.66
12WPY31-19	98.2	7.85	193.4	66.4	2.8	208.7	0.34	77.7	2.09	0.70	37.68
12WPY31-35	99.7	7.98	154.3	109.1	2.7	179.4	0.71	68.1	2.36	0.70	38.57
12WPY31-49	125.3	10.02	90.2	48.7	3.4	101.4	0.54	50.6	3.28	0.73	43.12
12WPY31-54	64.3	5.14	56.1	55.2	2.0	68.9	0.98	17.2	2.92	0.72	41.36
12WPY31-55	105.0	8.40	154.0	19.6	1.4	158.5	0.13	66.8	3.70	0.74	43.59
12WPY31-85	119.2	9.53	85.3	69.2	2.6	101.2	0.81	47.9	3.24	0.73	43.20
12WPY31-91	103.4	8.27	67.1	31.3	1.9	74.4	0.47	29.7	2.82	0.71	39.81
12WPY31-92	94.7	7.57	94.6	39.6	1.1	103.8	0.42	41.8	6.57	0.78	54.40
12WPY31-99	96.0	7.68	262.8	74.9	4.0	280.0	0.28	104.1	2.65	0.71	39.71
12WPY31-118	99.3	7.94	231.2	204.8	1.1	278.3	0.89	105.2	2.64	0.70	38.72
12WPY31-126	78.9	6.31	91.2	42.6	0.7	101.0	0.47	32.4	4.52	0.75	46.56
12WPY32-3	132.3	10.59	15.2	34.4	0.6	23.1	2.26	12.2	3.59	0.73	44.69
12WPY32-8	56.2	4.49	192.1	37.9	0.6	200.8	0.20	42.2	1.79	0.69	36.18
12WPY32-12	66.9	5.35	239.7	89.9	2.1	260.4	0.38	69.7	3.56	0.74	44.06
12WPY32-24	115.1	9.21	75.5	30.8	0.9	82.6	0.41	35.7	1.93	0.69	36.84
12WPY32-25	84.8	6.79	76.3	53.5	2.1	88.6	0.70	30.7	4.13	0.75	47.14
12WPY32-29	166.8	13.35	112.4	89.0	2.4	132.9	0.79	85.0	2.37	0.70	38.94
12WPY32-37	117.4	9.39	39.7	41.3	0.6	49.2	1.04	22.3	2.48	0.71	40.39
12WPY32-38	81.5	6.52	38.7	34.1	2.0	46.6	0.88	15.8	5.76	0.77	51.22
12WPY32-47	90.6	7.25	186.5	37.1	0.7	195.1	0.20	65.6	1.95	0.68	35.37
12WPY32-55	95.5	7.64	33.4	31.6	2.3	40.7	0.95	15.6	3.40	0.74	45.00

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY32-63	109.7	8.78	139.5	119.6	2.7	167.0	0.86	70.2	2.75	0.70	39.21
12WPY32-66	152.0	12.16	65.4	25.2	4.3	71.2	0.39	43.9	3.61	0.74	45.14
12WPY32-68	137.1	10.96	58.3	23.7	0.2	63.8	0.41	34.0	2.55	0.71	40.07
12WPY32-87	86.9	6.95	166.2	97.4	4.8	188.6	0.59	63.5	2.62	0.71	40.38
12WPY32-93	80.5	6.44	42.8	34.6	2.7	50.7	0.81	15.8	2.75	0.71	40.60
12WPY32-112	98.9	7.91	135.9	72.3	4.2	152.6	0.53	57.1	2.11	0.70	37.77
12WPY33-8	98.8	7.90	211.6	114.0	4.9	237.8	0.54	88.4	2.17	0.69	37.18
12WPY33-11	99.4	7.95	77.9	81.4	0.6	96.7	1.04	34.3	1.58	0.66	33.34
12WPY33-27	112.0	8.96	120.1	88.5	0.5	140.4	0.74	65.5	4.94	0.76	50.22
12WPY33-36	100.7	8.05	72.8	26.3	0.5	78.9	0.36	30.0	2.03	0.70	37.38
12WPY33-38	110.3	8.82	220.7	50.0	0.4	232.2	0.23	90.7	1.31	0.65	31.73
12WPY33-49	88.0	7.04	77.1	66.2	0.7	92.4	0.86	30.7	2.05	0.69	38.06
12WPY33-50	71.2	5.69	92.5	30.6	0.8	99.6	0.33	28.3	3.18	0.74	43.90
12WPY33-56	124.1	9.93	182.9	94.6	0.9	204.7	0.52	100.3	3.56	0.72	42.10
12WPY33-58	113.6	9.09	76.0	87.3	0.7	96.1	1.15	38.5	1.73	0.65	32.59
12WPY33-63	108.0	8.64	40.9	32.4	0.5	48.3	0.79	19.3	1.97	0.68	35.89
12WPY33-74	98.9	7.91	317.1	151.7	1.8	352.0	0.48	134.9	2.61	0.71	40.04
12WPY33-79	89.2	7.14	368.6	12.7	0.3	371.5	0.03	131.2	2.67	0.73	41.53
12WPY33-80	84.5	6.76	106.9	82.9	1.2	126.0	0.78	38.9	1.72	0.67	35.05
12WPY33-81	77.4	6.19	83.6	36.9	1.5	92.1	0.44	27.8	2.68	0.72	40.69
12WPY33-82	91.6	7.33	186.1	36.2	0.8	194.4	0.19	66.9	2.20	0.69	36.46
12WPY33-100	83.0	6.64	107.1	45.0	1.1	117.4	0.42	36.7	1.98	0.69	37.21
12WPY33-105	89.1	7.13	64.4	48.9	2.3	75.6	0.76	25.7	2.52	0.70	38.95
12WPY35-1	98.0	7.84	188.5	33.4	1.0	196.2	0.18	68.1	1.22	0.65	31.69

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY35-14	100.4	8.04	228.1	105.6	0.5	252.4	0.46	92.6	1.55	0.67	34.49
12WPY35-16	92.2	7.37	268.9	103.9	1.2	292.8	0.39	102.1	2.22	0.70	37.46
12WPY35-22	99.6	7.97	86.4	53.7	0.2	98.7	0.62	38.2	2.56	0.71	40.45
12WPY35-41	113.4	9.07	142.6	42.2	0.8	152.3	0.30	66.3	2.24	0.71	38.69
12WPY35-76	98.1	7.85	184.0	68.7	0.7	199.9	0.37	75.2	2.26	0.71	38.76
12WPY35-88	76.7	6.14	63.2	33.0	0.8	70.8	0.52	20.3	2.00	0.69	36.80
12WPY35-92	80.7	6.46	75.3	64.8	0.3	90.3	0.86	25.8	1.41	0.65	32.82
12WPY35-97	82.2	6.58	31.9	6.5	0.5	33.4	0.20	10.5	2.10	0.70	37.80
12WPY35-104	84.2	6.73	82.8	35.0	1.9	90.8	0.42	30.0	3.04	0.72	41.47
12WPY35-106	94.0	7.52	98.4	54.1	1.3	110.9	0.55	38.0	1.81	0.67	34.59
12WPY35-117	90.8	7.26	197.6	53.8	0.6	210.0	0.27	73.7	2.48	0.71	39.55
12WPY35-118	104.8	8.38	229.9	46.5	1.5	240.6	0.20	88.8	1.19	0.65	31.35
12WPY36-4	84.1	6.73	87.1	18.4	0.4	91.3	0.21	27.7	1.49	0.66	33.00
12WPY36-6	77.0	6.16	97.3	40.4	1.0	106.6	0.42	28.5	1.16	0.64	30.90
12WPY36-28	101.1	8.09	187.6	24.2	0.5	193.2	0.13	71.8	1.83	0.68	34.21
12WPY36-34	84.4	6.75	120.8	24.2	0.8	126.4	0.20	38.6	1.55	0.67	33.41
12WPY36-48	100.2	8.01	270.3	74.0	0.4	287.4	0.27	103.6	1.58	0.66	33.06
12WPY36-59	111.3	8.91	159.8	49.6	0.5	171.2	0.31	73.4	2.25	0.71	39.01
12WPY36-60	96.5	7.72	96.0	29.7	1.4	102.8	0.31	36.5	1.85	0.68	34.74
12WPY36-65	78.1	6.25	123.8	106.1	0.9	148.2	0.86	41.6	1.54	0.66	33.82
12WPY36-80	112.9	9.03	276.5	189.8	1.4	320.2	0.69	126.8	1.35	0.64	31.76
12WPY36-84	70.8	5.66	84.4	45.7	0.3	94.9	0.54	23.3	1.23	0.64	31.06
12WPY36-88	127.4	10.19	147.0	45.7	0.9	157.5	0.31	69.9	1.13	0.64	30.75
12WPY36-90	77.4	6.19	71.7	29.3	0.5	78.4	0.41	21.5	1.43	0.65	32.24

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY36-103	85.2	6.82	232.8	93.3	1.2	254.3	0.40	74.5	1.13	0.63	30.24
12WPY36-104	86.5	6.92	141.5	81.7	2.8	160.3	0.58	49.5	1.34	0.66	33.04
12WPY36-106	71.3	5.71	250.1	57.3	1.3	263.3	0.23	65.7	1.20	0.65	31.08
12WPY36-113	64.6	5.17	241.6	147.0	1.7	275.4	0.61	64.7	1.86	0.67	34.61
12WPY36-125	75.1	6.01	130.0	28.4	0.4	136.5	0.22	37.7	1.72	0.68	34.81
12WPY38-12	138.7	11.09	75.4	46.9	0.9	86.1	0.62	45.9	2.48	0.70	39.08
12WPY38-22	170.4	13.64	85.3	90.6	4.1	106.2	1.06	76.3	5.70	0.77	52.27
12WPY38-33	164.0	13.12	65.9	77.1	0.5	83.6	1.17	60.4	9.62	0.80	62.07
12WPY38-37	170.9	13.68	107.2	47.7	1.3	118.2	0.44	82.7	3.80	0.75	46.57
12WPY38-38	176.6	14.13	194.5	70.3	1.3	210.7	0.36	154.1	4.44	0.76	48.02
12WPY38-47	124.6	9.97	114.7	40.4	0.5	124.0	0.35	66.7	6.79	0.79	56.72
12WPY38-52	133.7	10.69	42.9	23.6	0.8	48.4	0.55	27.3	5.55	0.78	52.61
12WPY38-61	150.2	12.02	62.3	31.9	0.4	69.6	0.51	44.5	6.00	0.78	53.82
12WPY38-72	116.8	9.35	34.3	44.2	1.3	44.5	1.29	20.6	3.33	0.73	43.35
12WPY38-86	137.1	10.97	52.0	23.1	0.5	57.3	0.44	31.7	3.64	0.74	44.79
12WPY38-90	143.8	11.50	203.6	55.3	0.9	216.4	0.27	128.4	4.66	0.76	47.64
12WPY38-92	139.6	11.17	55.5	42.8	0.8	65.4	0.77	36.8	3.82	0.74	44.98
12WPY38-102	94.5	7.56	49.4	27.7	0.7	55.7	0.56	22.3	6.35	0.78	53.21
12WPY38-103	102.4	8.19	73.5	53.0	0.8	85.7	0.72	36.0	4.09	0.75	47.90
12WPY38-122	109.9	8.79	351.0	20.2	1.0	355.6	0.06	158.5	3.82	0.75	44.65
13WPY04-3	147.2	11.78	170.3	139.5	48.1	202.6	0.82	132.0	10.79	0.81	63.17
13WPY04-4	179.8	14.38	64.4	46.0	0.8	75.0	0.71	54.9	4.21	0.74	46.02
13WPY04-6	227.8	18.22	42.7	54.4	1.6	55.2	1.27	53.4	7.28	0.77	53.12
13WPY04-7	188.4	15.07	103.0	29.2	7.4	109.7	0.28	86.9	5.21	0.77	50.07

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
13WPY04-8	117.3	9.38	110.9	42.9	1.0	120.8	0.39	56.7	3.58	0.74	43.59
13WPY04-10	178.1	14.25	190.9	79.6	1.4	209.2	0.42	155.8	5.21	0.77	49.81
13WPY04-14	134.8	10.79	202.1	59.5	0.7	215.8	0.29	123.3	5.72	0.78	52.54
13WPY04-35	129.6	10.37	58.4	36.4	0.8	66.7	0.62	32.6	2.06	0.69	37.28
13WPY04-41	174.7	13.98	170.6	94.2	1.2	192.3	0.55	140.1	5.24	0.76	49.53
13WPY04-55	154.7	12.38	112.6	35.3	0.8	120.7	0.31	77.3	4.94	0.76	48.10
13WPY04-56	176.2	14.09	48.8	38.6	2.6	57.7	0.79	42.7	6.06	0.77	51.43
13WPY04-57	121.2	9.69	73.4	59.8	1.2	87.2	0.81	40.0	2.44	0.70	38.04
13WPY04-62	128.2	10.25	135.3	47.4	0.5	146.2	0.35	71.1	2.13	0.70	37.51
13WPY04-63	139.8	11.18	27.2	24.6	1.4	32.9	0.90	18.9	4.47	0.75	47.85
13WPY04-71	163.9	13.11	154.1	43.0	1.6	164.0	0.28	104.2	2.47	0.71	39.27
13WPY04-74	178.4	14.27	135.6	44.1	0.5	145.8	0.33	100.5	2.34	0.71	39.01
13WPY04-96	182.8	14.63	61.5	26.4	0.7	67.6	0.43	44.8	1.62	0.66	33.54
13WPY04-97	152.5	12.20	177.0	64.8	0.9	191.9	0.37	112.6	2.37	0.71	38.77
13WPY04-121	178.7	14.30	65.6	40.7	1.2	74.9	0.62	57.9	7.59	0.79	56.58
13WPY04-123	175.3	14.02	324.2	142.6	1.2	357.0	0.44	254.2	4.40	0.74	45.25

Mt. Jara zircon (U-Th)/He data

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY05-58	94.0	7.52	63.4	20.1	0.4	68.0	0.32	24.9	2.98	0.72	40.27
12WPY05-79	66.2	5.30	139.9	45.4	0.4	150.4	0.32	37.4	2.04	0.69	36.82
12WPY05-123	102.5	8.20	33.0	25.3	0.6	38.8	0.77	16.6	5.67	0.77	50.62
12WPY05-134	58.0	4.64	161.2	29.3	0.9	167.9	0.18	36.7	2.13	0.70	36.91
12WPY06-17	78.5	6.28	104.8	71.9	0.6	121.4	0.69	36.1	2.43	0.70	38.25
12WPY06-71	78.7	6.30	103.3	31.7	0.3	110.6	0.31	33.0	2.10	0.70	37.49
12WPY06-101	99.2	7.94	111.7	72.8	2.3	128.4	0.65	48.3	2.14	0.70	37.91
12WPY06-114	39.8	3.18	299.8	101.4	1.6	323.2	0.34	49.6	2.66	0.71	39.83
12WPY19-2*	283.3	22.67	56.1	26.6	1.9	62.2	0.47	79.2	12.08	0.81	64.50
12WPY19-31	138.8	11.10	183.4	27.0	0.6	189.6	0.15	109.8	4.42	0.77	49.02
12WPY19-32	157.8	12.63	125.7	84.4	0.8	145.2	0.67	98.6	7.13	0.79	56.09
12WPY19-49	68.6	5.49	354.4	104.6	1.0	378.4	0.30	109.9	6.19	0.78	53.25
12WPY19-51	134.8	10.78	103.6	49.1	1.2	114.9	0.47	67.6	8.82	0.80	59.51
12WPY19-57	159.6	12.77	212.6	40.0	0.8	221.9	0.19	156.5	9.00	0.81	61.62
12WPY19-58	116.7	9.34	50.0	16.9	0.2	53.9	0.34	26.0	4.39	0.76	48.26
12WPY19-67	102.5	8.20	219.9	120.2	1.0	247.6	0.55	100.6	3.36	0.73	42.86
12WPY19-74	151.8	12.14	156.0	78.6	0.9	174.1	0.50	109.0	5.21	0.76	47.90
12WPY19-88	70.9	5.67	289.9	72.6	1.0	306.6	0.25	93.3	6.66	0.79	56.08
12WPY19-91	160.5	12.84	194.6	137.1	6.9	226.1	0.70	148.5	4.54	0.75	46.90
12WPY19-95	138.0	11.04	119.5	80.4	1.1	138.0	0.67	79.9	5.84	0.77	51.27
12WPY19-107	179.4	14.35	169.1	72.9	1.1	185.9	0.43	140.1	4.96	0.77	50.59
12WPY19-111	131.8	10.54	91.9	56.5	0.8	104.9	0.62	58.5	5.87	0.78	52.79
12WPY19-112	160.3	12.83	135.6	92.1	1.7	156.8	0.68	105.5	5.03	0.77	51.05

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY19-113	168.7	13.49	52.3	30.7	1.8	59.4	0.59	43.3	7.11	0.79	56.42
12WPY19-120	181.2	14.50	192.6	95.7	0.7	214.7	0.50	156.8	3.99	0.74	44.31

*excluded outliers

Mt. Baygoura zircon (U-Th)/He data

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY41-32*	242.2	19.38	67.4	90.3	6.2	88.2	1.34	71.0	0.89	0.61	28.78
12WPY41-76*	354.9	28.40	5.0	2.9	0.5	5.7	0.59	7.4	1.47	0.67	33.95
12WPY41-81	55.9	4.47	124.9	210.9	1.9	173.5	1.69	32.8	1.11	0.62	30.32
12WPY41-87	52.0	4.16	194.3	90.8	2.9	215.2	0.47	39.9	1.53	0.66	32.83
12WPY41-97	69.7	5.58	159.1	187.4	5.0	202.3	1.18	48.7	1.41	0.64	31.35
12WPY41-106	65.5	5.24	71.8	33.6	0.8	79.6	0.47	19.3	1.83	0.68	36.07
12WPY43-71*	504.7	40.38	25.4	17.7	0.4	29.5	0.70	48.4	0.73	0.59	26.61
12WPY43-77	75.6	6.05	258.6	66.1	0.9	273.9	0.26	64.1	0.66	0.57	24.89
12WPY43-92	90.9	7.27	27.3	53.0	1.1	39.5	1.94	11.7	0.90	0.60	28.38
12WPY43-113	45.1	3.61	72.6	34.5	0.5	80.5	0.48	12.6	1.19	0.64	31.22
12WPY43-121	61.2	4.89	88.1	44.4	0.3	98.3	0.50	20.9	1.29	0.64	31.09
12WPY43-126	50.7	4.05	117.3	25.1	0.7	123.1	0.21	22.2	1.52	0.66	32.37
12WPY45-19	45.2	2.71	73.4	38.3	1.9	82.2	0.52	13.7	1.85	0.68	35.86
12WPY45-24	53.8	3.23	61.2	40.3	2.6	70.5	0.66	13.8	1.61	0.67	34.90
12WPY45-25	51.4	3.08	27.8	21.0	0.7	32.6	0.75	6.7	3.48	0.73	43.84
12WPY45-31	48.3	2.90	179.9	49.8	1.5	191.4	0.28	33.3	1.65	0.67	33.25
12WPY45-36	39.8	2.39	328.1	619.8	3.3	470.8	1.89	63.3	1.17	0.62	30.38
12WPY45-49	50.2	3.01	84.1	43.1	0.8	94.0	0.51	15.8	0.91	0.62	29.00
12WPY45-59	74.6	4.48	39.9	26.0	0.5	45.9	0.65	12.3	1.43	0.66	33.46
12WPY45-64	72.9	4.38	117.5	48.9	1.2	128.7	0.42	33.1	1.33	0.65	31.90
12WPY45-67	66.9	4.02	180.4	10.6	1.0	182.8	0.06	44.4	1.63	0.67	33.23
12WPY45-79	58.3	3.50	135.9	261.2	1.9	196.0	1.92	41.4	1.79	0.66	34.90
12WPY45-104	60.4	3.62	226.5	68.2	1.8	242.2	0.30	51.8	1.39	0.65	32.07

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY45-122	82.0	4.92	324.8	53.6	0.3	337.1	0.16	97.4	1.43	0.65	31.40
12WPY45-123	71.0	4.26	234.6	49.0	1.2	245.8	0.21	62.7	1.49	0.66	32.92
12WPY47-30	40.0	3.20	149.0	180.9	2.6	190.7	1.21	25.4	0.93	0.61	29.23
12WPY47-41	78.0	6.24	159.0	78.3	0.9	177.0	0.49	50.8	1.66	0.68	35.30
12WPY47-42	45.6	3.65	61.7	58.1	1.4	75.1	0.94	11.6	1.02	0.62	30.14
12WPY47-54	54.6	4.37	115.9	50.6	1.0	127.6	0.44	24.4	1.26	0.65	31.49
12WPY47-67	96.5	7.72	296.4	54.8	0.5	309.0	0.18	121.7	3.83	0.75	46.12
12WPY47-74	50.6	4.05	70.5	23.7	0.4	76.0	0.34	13.4	1.30	0.64	31.00
12WPY47-77	47.0	3.76	393.8	200.2	1.4	439.9	0.51	69.2	0.93	0.62	29.01
12WPY47-79	46.6	3.73	71.9	59.9	0.4	85.6	0.83	14.4	1.54	0.66	33.94
12WPY47-96	64.4	5.15	179.5	44.2	0.7	189.7	0.25	42.2	1.21	0.64	30.32
12WPY47-111	58.9	4.71	43.8	13.0	0.9	46.8	0.30	9.8	1.22	0.65	31.97
12WPY47-113	66.9	5.35	46.8	41.4	0.4	56.3	0.89	13.3	1.32	0.65	32.65

*excluded outliers

Labourd Massif zircon (U-Th)/He data

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY10-23*	269.9	21.60	220.2	12.9	0.3	223.2	0.06	269.7	9.35	0.81	61.94
12WPY10-26	52.1	4.17	204.2	7.7	0.3	206.0	0.04	46.3	8.17	0.80	57.01
12WPY10-28	51.2	4.10	278.0	23.6	0.4	283.5	0.08	61.6	6.98	0.78	53.35
12WPY10-45	60.2	4.82	339.7	12.7	0.4	342.6	0.04	92.9	14.43	0.83	69.36
12WPY10-87	74.9	5.99	251.4	56.3	0.5	264.4	0.22	83.6	7.14	0.78	52.44
12WPY10-123	64.7	5.18	352.3	31.9	0.5	359.6	0.09	98.4	6.33	0.78	52.29
12WPY11-27	57.7	4.61	160.1	25.0	0.4	165.9	0.16	34.0	1.37	0.66	32.14
12WPY11-30	60.1	4.81	222.2	34.3	0.4	230.1	0.15	52.4	2.20	0.70	37.25
12WPY11-67	64.2	5.14	229.0	19.4	0.2	233.4	0.08	55.3	1.81	0.68	34.77
12WPY11-71	58.9	4.71	189.3	90.6	0.8	210.1	0.48	54.3	9.68	0.81	62.10
12WPY11-73	83.2	6.65	196.3	25.2	0.6	202.1	0.13	65.9	2.69	0.72	40.70
12WPY12-28	47.2	3.77	113.4	13.6	1.2	116.6	0.12	21.9	3.93	0.74	42.93
12WPY12-36*	110.9	8.87	157.2	15.6	0.3	160.8	0.10	69.4	2.56	0.72	39.62
12WPY12-37	58.0	4.64	347.3	80.2	0.7	365.8	0.23	78.7	1.77	0.69	35.59
12WPY12-44	51.1	4.09	165.4	56.2	1.1	178.3	0.34	31.9	1.37	0.65	31.40
12WPY12-88	58.9	4.71	128.4	26.1	0.3	134.4	0.20	32.7	4.34	0.76	48.53
12WPY12-96	52.2	4.18	328.6	36.9	0.5	337.1	0.11	58.7	0.86	0.62	28.08
12WPY12-108	39.4	3.15	137.8	47.4	1.1	148.8	0.34	21.4	1.64	0.68	34.63
12WPY13-67	58.5	4.68	278.4	10.3	0.3	280.8	0.04	66.5	4.20	0.75	45.02
12WPY13-74	38.2	3.06	73.0	14.6	0.4	76.4	0.20	12.3	5.27	0.78	51.60
12WPY13-106	47.9	3.84	119.9	15.5	0.4	123.5	0.13	24.1	3.78	0.75	45.81
12WPY13-120	51.5	4.12	159.3	35.0	0.4	167.3	0.22	35.9	5.44	0.77	50.06
12WPY18-38	46.8	2.81	122.8	15.0	0.3	126.3	0.12	26.4	11.81	0.83	67.28

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY18-66	55.3	3.32	339.5	73.1	0.8	356.3	0.22	88.4	14.44	0.83	68.70
12WPY18-67	52.3	3.14	234.4	52.3	0.6	246.5	0.22	54.4	6.22	0.78	52.32
12WPY18-78	58.3	3.50	202.4	80.5	0.3	220.9	0.40	56.0	8.68	0.80	59.75
12WPY18-97	48.9	2.93	353.8	286.2	3.1	419.7	0.81	90.5	11.33	0.81	64.66
12WPY18-113	65.7	3.94	148.9	5.4	0.1	150.2	0.04	43.2	8.35	0.81	60.31
12WPY48-12	47.0	3.76	167.0	19.1	1.2	171.4	0.11	31.7	2.92	0.73	41.40
12WPY48-23	57.5	4.60	211.7	52.4	6.1	223.8	0.25	51.5	3.86	0.74	43.86
12WPY48-85	42.9	3.43	115.9	17.4	0.6	119.9	0.15	20.1	2.65	0.72	40.57
12WPY48-112	52.6	4.20	212.7	18.1	0.9	216.9	0.09	45.3	3.53	0.74	42.66
12WPY54-50	42.4	3.39	164.6	6.6	0.2	166.1	0.04	25.4	1.47	0.67	32.88
12WPY54-56	45.9	3.67	127.2	16.1	0.6	130.9	0.13	23.3	2.63	0.72	39.55
12WPY54-69	48.2	3.86	188.9	12.7	1.0	191.8	0.07	32.4	1.18	0.65	30.87
12WPY54-89	37.4	2.99	60.7	7.7	0.4	62.5	0.13	8.8	1.94	0.70	37.14
12WPY54-106	42.8	3.43	124.2	4.9	0.1	125.3	0.04	20.8	2.62	0.72	39.64
12WPY54-115*	1249.0	99.92	11.1	1.0	0.1	11.3	0.09	59.6	1.99	0.70	37.62
12WPY55-7	67.6	4.06	82.3	38.5	1.1	91.2	0.47	25.7	5.15	0.77	50.65
12WPY55-25	57.0	3.42	51.9	29.2	4.1	58.7	0.56	12.9	2.67	0.71	39.98
12WPY55-26	52.6	3.15	48.3	22.6	0.8	53.5	0.47	10.5	2.04	0.69	36.84
12WPY55-27	42.8	2.57	30.2	14.2	1.6	33.5	0.47	6.2	8.56	0.80	59.27
12WPY55-32	83.9	5.03	185.9	85.4	0.6	205.6	0.46	69.7	3.58	0.74	45.55
12WPY55-37	91.4	5.48	183.0	59.0	1.5	196.6	0.32	80.4	12.27	0.82	67.14
12WPY55-51	75.7	4.54	93.8	41.8	1.1	103.4	0.45	32.1	4.67	0.75	47.43
12WPY55-61	50.4	3.03	205.4	40.9	0.7	214.8	0.20	44.7	4.33	0.76	48.50
12WPY55-71	77.5	4.65	129.9	12.6	1.7	132.8	0.10	45.5	9.47	0.82	63.01

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY55-81	66.2	3.97	228.6	137.3	1.7	260.2	0.60	65.0	2.23	0.70	37.78
12WPY55-97	88.8	5.33	144.5	67.0	1.2	159.9	0.46	55.3	2.68	0.72	40.71
12WPY55-104	76.4	4.58	153.1	20.0	0.4	157.7	0.13	50.6	5.13	0.77	51.05
12WPY55-105	64.4	3.86	75.6	46.7	4.6	86.4	0.62	23.0	5.07	0.76	49.58
12WPY55-120	67.2	4.03	58.6	57.1	0.9	71.7	0.98	20.4	6.16	0.78	54.08
13WPY07-10	51.5	4.12	113.4	5.9	0.7	114.7	0.05	21.5	1.47	0.67	33.50
13WPY07-34	62.0	4.96	219.0	5.9	0.2	220.3	0.03	47.8	1.14	0.65	30.68
13WPY07-49	47.0	3.76	106.9	10.1	0.1	109.2	0.09	19.4	2.01	0.70	37.18
13WPY07-84	48.1	3.85	127.2	4.9	0.2	128.3	0.04	23.4	1.92	0.70	36.88
13WPY07-88	42.7	3.41	163.5	4.0	0.2	164.4	0.02	25.8	1.53	0.68	34.38
13WPY07-122*	166.5	13.32	116.5	19.2	0.5	121.0	0.16	80.3	3.33	0.73	42.15
13WPY07-123	43.9	3.51	130.3	4.5	0.2	131.3	0.03	23.2	3.53	0.74	43.96
13WPY07-125	53.0	4.24	149.9	150.0	0.9	184.5	1.00	37.2	2.44	0.70	38.99

*excluded outliers

North Mauléon sub-Basin zircon (U-Th)/He data

Sample	Age (Ma)	err. (Ma)	U (ppm)	Th (ppm)	147Sm (ppm)	[U]e	Th/U	He (nmol/g)	mass (ug)	Ft	ESR
12WPY59-9	40.4	2.42	78.2	65.6	2.5	93.4	0.84	12.8	1.08	0.63	30.24
12WPY59-11	80.8	4.85	237.2	256.9	1.4	296.4	1.08	98.2	4.73	0.75	48.39
12WPY59-15*	135.7	10.85	113.9	40.7	0.4	123.3	0.36	61.6	1.65	0.68	34.81
12WPY59-42	35.5	2.13	41.9	20.8	0.4	46.7	0.50	6.1	1.62	0.68	34.91
12WPY59-52	62.8	3.77	61.8	73.4	1.2	78.7	1.19	20.6	4.96	0.76	51.09
12WPY59-53	41.1	3.29	82.0	55.8	0.7	94.9	0.68	14.1	1.60	0.67	34.24
12WPY59-67	65.7	5.25	152.4	64.6	0.5	167.3	0.42	40.7	1.86	0.68	35.87
12WPY59-70	49.5	2.97	212.5	114.2	0.7	238.8	0.54	44.6	2.12	0.70	37.83
12WPY59-75	44.4	2.66	141.2	20.5	0.2	145.9	0.15	24.1	1.76	0.69	35.75
12WPY59-76	53.4	4.27	79.3	40.3	0.8	88.5	0.51	17.4	1.83	0.68	35.29
12WPY59-77	38.9	3.11	33.1	35.3	0.6	41.2	1.07	6.0	2.02	0.69	37.82
12WPY59-81	48.9	3.91	86.9	60.1	0.5	100.7	0.69	18.8	2.50	0.70	39.18
12WPY59-82	66.4	5.31	247.5	156.9	1.1	283.7	0.63	65.7	1.44	0.64	31.56
12WPY59-96	51.7	3.10	153.7	85.4	0.9	173.4	0.56	32.1	1.66	0.66	33.39
12WPY59-104*	140.5	11.24	42.7	26.1	0.3	48.7	0.61	23.4	1.08	0.63	30.15
12WPY59-105	52.8	4.23	175.8	30.3	0.8	182.8	0.17	33.2	1.02	0.64	29.91
12WPY59-113	82.0	6.56	119.9	93.8	1.1	141.5	0.78	40.9	1.49	0.65	32.26
13WPY06-6	52.2	4.17	481.6	33.9	0.2	489.4	0.07	107.7	6.34	0.78	52.02
13WPY06-120	68.1	5.45	327.6	102.5	0.3	351.2	0.31	105.5	11.51	0.81	63.41
13WPY06-122*	13.4	1.07	1081.7	89.6	0.7	1102.4	0.08	62.4	7.08	0.78	53.17
13WPY06-124	48.3	3.87	409.9	57.9	0.6	423.2	0.14	85.1	5.41	0.77	49.78

*excluded outliers

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Vita

Nicole Hart grew up in Troy, Michigan and attended Michigan State University where she graduated with honors with a Bachelor of Science degree in Environmental Geosciences with a concentration in Geophysics and an additional degree in Geological Sciences. During her undergraduate degree she participated in the Wasatch-Unita Summer field camp and also completed an undergraduate research project that addressed the provenance and sediment dispersal trends of the Midcontinent Rift system and was supervised by Dr. Brian Hampton. She graduated from Michigan State University in May of 2012 and started her graduate school career in the fall of 2012 under the supervision of Dr. Daniel Stockli. After graduation in May of 2015, she will start work as an exploration geologist for ConocoPhillips.

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